

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.]

No. 2113.—VOL. XLVI.

LONDON, SATURDAY FEBRUARY, 19, 1876.

WITH SUPPLEMENT. PRICE SIXPENCE. PER ANNUM, BY POST, £1 4s.

R. JAMES H. CROFTS, STOCK AND SHARE BROKER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
Established 1842.

Business transacted in all descriptions of MINING Stocks and Shares (British Foreign), Consols, Bonds, (Foreign and Colonial), Railways, Miscellaneous, Insurance, Assurance, Telegraph, Shipping, Canal, Gas, Water, and Shares.
Business negotiated in Stocks and Shares not having a general market value.
Business in all COLLIERIES and IRON Shares, and in the principal WAGON and FACTURING COMPANIES of the NORTH of ENGLAND and SCOTLAND.
J. H. Crofts, having now established CORRESPONDING AGENCIES in all the Towns of the United Kingdom, is prepared to deal in the various LOCAL and Shares at close market prices.
Accounts opened for the Fortnightly Settlement.
Monthly and Daily Price Lists issued.

Bankers: City Bank, London; South Cornwall Bank, St. Austell.

REAL DEALINGS in the following SHARES:—

Antine.	East Van.	Pateley.
Daunant.	Emma.	Palmer's Shipbuilding.
Glyn.	Flagstaff.	Plympton.
London.	Glyn.	Rookhope Valley.
	Great West Van.	Roman Gravel.
	Javali.	Richmond.
	Llanrwst.	St. Patrick.
	Monydd Gorddu.	Sweetland.
	Marke Valley.	Tankerville.
	Old Treburgett.	Van Consols.
	Penstruthal.	West Craven Moor.
	Parys Mountain.	West Chiverton.
	Pennant.	

FOR SALE, 100 Thornhill Reef, 1s. 6d.

BUSINESS IN POSITIVE ASSURANCE SHARES.
Shares sold for forward delivery (one or two months) on deposit of 20 per cent on hand in all the leading TIN, COPPER, and LEAD Shares.

EGYPTIAN AND TURKISH BONDS.—SPECIAL BUSINESS.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

WILWAYS.—SPECIAL BUSINESS. Fortnightly accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

R. WILLIAM H. BUMPUS, STOCK AND SHARE BROKER,
44, THREADNEEDLE STREET, LONDON, E.C.
[Established 1877.]

PURCHASES and SALES effected, on the best possible terms, in—
GOLD, RAILWAYS, FOREIGN BONDS, and STOCK EXCHANGE
of every description for INVESTMENT or SPECULATION.
References given and required when necessary.

A STOCK AND SHARE LIST sent FREE on application.
B.—The NATIONAL PROVINCIAL BANK OF ENGLAND, E.C.

B. has SPECIAL BUSINESS, at close market prices, in the SHARES
of the principal HOME and FOREIGN MINES, including:—
East Van, Van Consols, Glyn, Great West Van, Great Laxey, North Laxey,
Gravel, Tankerville, West Tankerville, Ladywell, Pateley Bridge, West
Van, Parys Mountain, East Caradon, Marke Valley, Wheel Agar, Wheel
Grenville, Argentine, Condes de Chilli, Eberhardt, San Pedro,
and Creek, &c.

MINING INVESTMENTS.—BRITISH LEAD MINES.
Profits may be realized during the next few months by judiciously invest
present prices, in Sound Dividend and Progressive Mines. Reliable in
and advice respecting the above, and a carefully-selected List of Shares
obtained on application.

WILLIAM HENRY BUMPUS, SWORN BROKER.
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.

FERDINAND R. KIRK, STOCKBROKER,
6, BIRCHIN LANE, E.C.

Foreign Bonds, Railways, and every security quoted on 'Change bought
can open speculative accounts on giving the usual "cover." Particulars
and Settlements made fortnightly. Having reliable agents established
of the leading towns of the United Kingdom, local Stocks and Shares may
be very beneficially.
In Lead Mines are now deservedly attracting great attention, and several
to continue rising in value. They may all be daily secured at the lowest
special attention is directed to North Laxey, East Van, Plympton,
Great Laxey, and West Tankerville, which can be dealt in very advan-

RISLEY (SWORN), STOCK AND SHARE BROKER,
77, CORNHILL, LONDON.

transacted at the following rates of commission:—Foreign Stocks, 1/4 per
Mining Shares of £4 each and upwards, 1/4 per cent.; under £4, 1s.

MESSRS. BLYTH AND HUTCHINSON, STOCK AND SHARE BROKERS,
3, GEORGE YARD, LOMBARD STREET, LONDON.
Business in all kinds of Stock Exchange Securities, also in Mining Shares
description; and will give any information respecting them on applica-
Monthly and Daily Price Lists issued.
Bankers: Alliance Bank.

MESSRS. A. ENDEAN, FISHER, AND CO., STOCK AND SHARE DEALERS,
3, LOMBARD COURT, LOMBARD STREET, E.C.

Bankers: London and Westminster, Lothbury.

THOMAS THOMPSON, JUN., 1, PALMERSTON BUILDINGS, BISHOPSGATE STREET, LONDON, E.C.
valuable hints as to the purchase of mining shares will be found in Mr.
"Investment Circular" for Feb. now ready, post free, price 6d.

M. W. MARLBOROUGH, STOCK AND SHARE DEALER,
BISHOPSGATE STREET, LONDON, E.C. (Established 19 Years).
following SHARES, at prices annexed:—
40 Frontino, £2 1/2.
30 Flagstaff, 34s. 6d.
35 Gold Run, 17s. 6d.
40 Gt. West Van, 15s. 9d.
15 Gunnislake, £3 11s. 3d.
50 Last Chance, 16s.
20 Ladywell, £2 13s. 9d.
40 Llanrwst, 27s. 6d.
25 Marke Valley, £3 1/2.
30 North Laxey, 35s. 6d.
40 New Consols, £1 3/4.
60 Old Treburgett, 11s 3d.
20 Pateley Bridge, 40s.
40 Pennerley, 25s.
50 Plympton, 15s.
25 Port Phillip, 15s. 9d.
50 Rookhope Valley, 27s. 6d.
10 Richmond, £6 4s.
50 St. Patrick, 27s. 6d.
30 San Pedro, £4 1/2.
50 Santa Barbara, 29s.
50 South Aurora, 12s. 6d.
25 Tecoma, 26s. 3d.
40 Van Consols, £2 8s 9d.
25 W. Assheton, £2 1/2.
30 W. Tankerville, £2 1/2.
15 Wheel Agar, £2 1/2.

GEORGE BUDGE, STOCK AND SHARE DEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C.
(Established 25 Years).
the following SHARES, at prices annexed:—
125 East Van, 125s. 6d.
125 Gold Run, 125s. 6d.
125 Gt. West Van, 125s. 6d.
125 Gunnislake, 125s. 6d.
125 Last Chance, 125s. 6d.
125 Ladywell, 125s. 6d.
125 Llanrwst, 125s. 6d.
125 Marke Valley, 125s. 6d.
125 North Laxey, 125s. 6d.
125 New Consols, 125s. 6d.
125 Old Treburgett, 125s. 6d.
125 Pateley Bridge, 125s. 6d.
125 Pennerley, 125s. 6d.
125 Plympton, 125s. 6d.
125 Port Phillip, 125s. 6d.
125 Rookhope Valley, 125s. 6d.
125 Richmond, 125s. 6d.
125 St. Patrick, 125s. 6d.
125 San Pedro, 125s. 6d.
125 Santa Barbara, 125s. 6d.
125 South Aurora, 125s. 6d.
125 Tecoma, 125s. 6d.
125 Van Consols, 125s. 6d.
125 W. Assheton, 125s. 6d.
125 W. Tankerville, 125s. 6d.
125 Wheel Agar, 125s. 6d.

INVESTMENTS IN BRITISH LEAD MINES.—

VAN LEAD MINE, EAST VAN, GREAT LAXEY, NORTH
LAXEY, WEST CHIVERTON, TANKERVILLE, ROMAN GRAVELS,
PENNERLEY, MINERA, WEST TANKERVILLE,
PARYS MOUNTAIN, LADYWELL, and several other DIVIDEND
AND PROGRESSIVE MINES, &c.

Read MESSRS. PETER WATSON AND COMPANY'S
BRITISH AND FOREIGN MINING NEWS,
STOCK AND SHARE INVESTMENT NOTES—
MINES, MINERALS, AND METAL MARKETS—SHARE LIST,
For JANUARY month.
Annual subscription, 5s.; single copy, 6d.

MESSRS. PETER WATSON AND CO.,

STOCK AND SHARE DEALERS,
79, OLD BROAD STREET, LONDON, E.C.
Bankers: The Alliance Bank (Limited).

MR. ALFRED E. COOKE, STOCK AND SHARE DEALER,
76, OLD BROAD STREET, LONDON.
(Established 1853.)

SPECIAL BUSINESS in the following:—

Aberdaunt.	Gladstone.	Rookhope.
Blue Tent.	Glyn.	Roman Gravel.
Central Van.	Great West Van.	St. Patrick.
Cakemore Colliery.	Llanrwst.	Tankerville.
Chapel House.	Monydd Gorddu.	West Craven Moor.
East Caradon.	North Laxey.	West Tankerville.
East Van.	Pateley Bridge.	Wye Valley.

Mr. COOKE issues daily price lists both of Stock Exchange and Mining Shares,
which will be forwarded on application.
STOCK EXCHANGE SPECULATION OR INVESTMENT.—Best information
given, and Fortnightly accounts opened. Terms on application.

LEAD MINES.—Special attention is directed to this class of investment.
Shares in some mines will have an important rise. Genuine investors are invited
to apply at once in order to secure a profit, as Mr. COOKE is in possession of ex-
clusive information respecting several valuable and improving properties.

MR. T. E. W. THOMAS, SHARE BROKER,
3, GREAT WINCHESTER STREET BUILDINGS, E.C.
Established 1857.

The following are the latest prices at which business could be done. Where the
difference between the buying and selling price is wide transactions may be
effected at an intermediate price:—

Buyers.	Sellers.	Buyers.	Sellers.
Argentine Gold (prem.)	£ 1 1/2	Pennerley	£ 1 1/2
Birdseye Creek	25s. 6d.	Penstruthal	8s. 10s.
Bog	35s. 6d.	Prince of Wales	4s. 5s.
Devon Great Consols	4 1/2	Plympton	16s. 18s.
Eberhardt	8 1/2	Richmond	6s. 6 1/2
East Caradon	25s. 23s.	Roman Gravel	14 1/2 14 1/2
East Van	21 1/2 22	Rookhope Valley (new)	1 1/2 1 1/2
Emma	25s. 25s.	Santa Barbara	1 1/2 1 1/2
Exchequer Gold	1 1/2 1 1/2	San Pedro	4 1/2 4 1/2
Flagstaff	1 1/2 1 1/2	South Condurrow	4 1/2 4 1/2
Glyn	1 1/2 1 1/2	Sweetland Creek	2 1/2 2 1/2
Great Laxey	17 1/2 18 1/2	Tankerville	12 12 1/2
Great West Van	14s. 16s.	Tinoroff	18 20
Hingston Down	15s. 17s. 6d.	Unity Wood	1 1/2 1 1/2
Javali	10s. 6d. 12s. 6d.	Van Consols	25s. 25s.
Marke Valley	3 3 1/2	West Chiverton (x.d.)	17 18
North Laxey	1 1/2 1 1/2	West Tankerville	2 2 1/2
New Consols	2 1/2 2 1/2	Wheel Agar	2 1/2 2 1/2
New Rosario	7s. 6d. 9s.	Wheel Crebor	2 2 1/2
Old Treburgett	10s. 11s.	Wh. Kitty (St. Agnes)	2 2 1/2
Parys Mountain	20s. 22s. 6d.	West Godolphin	1 1/2 1 1/2
Pateley Bridge	6 6 1/2		

The names of half-a-dozen mines selected for investment forwarded on applica-
tion.

MR. WILLIAM WARD
(LATE WARD AND LITTLEWOOD),
CROSBY HOUSE,
95, BISHOPSGATE STREET WITHIN, E.C.,
STOCK AND SHARE BROKER.

MR. E. J. BARTLETT, STOCK AND SHARE DEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., has SPECIAL BUSI-
NESS in St. Patrick, Wheel Kitty, South Condurrow, Wheel Whisper, Pennerley,
South Tolcarne, East Lovell, East Van, Llanrwst, East Caradon, West Craven
Moor, and Bampfylde shares at close prices.
Capitalists who seek Safe and Profitable Investments should act only upon the
soundest information. The market prices for the day are, for the most part,
governed by the immediate supply and demand, and not always by the bona
merits of the properties.
Mr. E. J. BARTLETT devotes special attention to every class of securities.

MESSRS. HARLAND AND CO., STOCK AND SHARE DEALERS,
235 and 236, GRESHAM HOUSE,
OLD BROAD STREET, LONDON, E.C.
Bankers: London and County Bank.

Messrs. H. and Co. have Special Business in Chapel House and Allam Collieries
Shares, also in the shares of the Oregon Gold, and the Patent Ligno Mineral
Paving Companies, and will be happy to give full particulars of the above desirable
investments on application.
Dealings at closest market prices in all kinds of Stocks and Shares.

MR. JAMES STOCKER, STOCK AND SHARE BROKER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
[Established 1848.]

BUSINESS transacted in all kinds of STOCK EXCHANGE SECURITIES,
also in every description of BRITISH and FOREIGN MINING SHARES.

SPECIAL BUSINESS in the following:—
Van. Wye Valley. Cathedral.
Van Consols. Plympton. Hingston Down.
West Tankerville. East Caradon. Bedford United.
Grogwinion. Marke Valley. West Craven Moor.
West Chiverton. Chapel House Colliery. Wheel Crebor.

Eberhardt. Sweetland Creek. Richmond.
Flagstaff. Emma. Frontino.
Javali. Chontales. Port Phillip.
Cedar Creek. Almada. Colorado.
Gold Run. San Pedro.
Public attention is evidently turned to good Mining Enterprises, which afford
great profits with small outlay. A large business is being transacted in the follow-
ing, J. S. having Special Business:—
East Van, Roman Gravel, Tankerville, Pateley Bridge, Great Laxey, Rookhope,
North Laxey, Ladywell, Assheton, Penstruthal, Great West Van, Pennerley, Old
Treburgett, Wheel Grenville, Parys Mountain, Argentine Gold, Exchequer, &c.]

FOR SALE, at annexed prices:—
40 Pennerley, 23s. 3d. 20 East Van, £22. 200 Gold Run, 17s. 6d.
20 Grogwinion, £5 1/2. 70 Santa Barbara, 25s. 50 Gt. West Van, 16s.
50 Chapel House, £3 1/2. 80 Parys Mountain, 21s. 60 Assheton, 37s. 6d.
30 Richmond, £6 6s. 6d. 60 Rookhope, 25s. 90 Nth. Laxey, 35s. 6d.

JAMES STOCKER, SWORN BROKER.
Consols, Foreign Bonds, Railways, Bank, Telegraph, Gas, and all miscellaneous
Shares bought and sold, and fortnightly accounts opened for same. Shares sold
for forward delivery on receipt of cover. List of prices and every information for-
warded on application.
Bankers: London and Westminster.

M. R. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

SIXTH EDITION.

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INVESTMENTS AND SPECULATIONS FOR 1876.—
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TEMPLE LEAD MINING COMPANY
(LIMITED).

This company is formed to work a VALUABLE LEAD MINE on the cele-
brated Van lode.
Full particulars may be obtained on application to CHARLES THOMAS, 3, Great
St. Helen's, London, E.C.

MESSRS. A. W. THOMAS AND CO.,
10, COLEMAN STREET, E.C.,
MINING AGENTS, AND STOCK AND SHARE DEALERS.

Our annual pamphlet, entitled "Investments and Speculations for 1876," is now
out of the printer's hands. Copies may be obtained upon application to us.

MESSRS. T. VOSPER AND CO.,
MINERAL AND GENERAL ESTATE AGENTS,
45, FINSBURY CIRCUS, LONDON.

MINES and PROPERTIES of all descriptions BOUGHT and SOLD.
DEALERS in STOCKS and SHARES.

Most reliable information obtained.

Special Business in Freehold and Leasehold Estates, also Lead, Co. per, and
China-Clay Companies.

G. E. SIMPSON, STOCK AND SHARE DEALER,
6, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C., will

SELL the FOLLOWING SHARES, free of commission:—
20 Australian, £2 1/2. 30 Glyn, £2 1/2. 45 Pennant, £5 3s. 9d.
40 Almada, 12s. 6d. 75 Gold Run, 16s. 3d. 50 Pennerley, £1 3s. 9d.
50 Assheton, £1 15s. 9d. 25 Grogwinion, £6. 40 Plympton, 15s.
40 Argentine, £7 1/2. 50 Great W. Van, 16s. 3d. 20 Richmond, £6 3s. 9d.
75 Blue Tent, £4 1/2. 40 Hingston, 17s. 6d. 25 Roman Grav., £14 1/2.
50 Birdseye Crk., £2 6s. 3d. 70 Javali, 11s. 6d. 70 Sweetland, £2 16s. 3d.
75 Chontales, 11s. 9d. 50 Ladywell, £2 1/2. 50 St. Patrick.
50 Cedar Creek, 20s. 25 Marke Valley, £3 1/2. 75 Santa Barbara, 26s.
30 Chapel House, £3 11s. 3 30 North Laxey, 35s. 20 San Pedro, £4 13s. 9d.
75 Cathedral, 24s. 50 New Rosario, 16s. 25 Tankerville, £12 1/2.
20 Eberhardt, £3 1/2. 70 Oregon, £4 1/2. 10 Van, £40.
50 Exchequer, 27s. 6d. 40 Parys Mount., 19s. 6d. 25 Wh. Grenville, £2 1/2.
10 East Van, £2 1/2. 50 Pateley Bridge, £6 7s. 6d. 50 W. Tankerville, £2 1/2.

JOHN ROBERT PIKE, STOCK AND SHARE DEALER,
In all the principal Investments of the day.
CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

Mr. PIKE can recommend several good investments just now at present prices,
which are free from risk.
All information may be had either personally or by letter.

LEAD MINES—MINING SUCCESSES—MINING FAILURES—
UNFORTUNATE and FORTUNATE SPECULATIONS—RAILWAYS—
FOREIGN MINES—GAS COMPANIES—UN-SOUND COMPANIES, &c. In-
formation on the above will be found in Reynolds's Select List, now in the press.

Forwarded gratis on application to—
JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
70 AND 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.

MESSRS. W. J. TALLENTIRE AND CO.,
STOCK AND SHARE BROKERS.

20, CHANGE ALLEY, CORNHILL, LONDON, E.C.,
Transact business in Stock Exchange Securities and Mining Shares of every de-
scription, either for immediate cash or the usual bi-monthly settlements, and also
afford advice personally or by letter to executors, trustees, capitalists, and investors
of every class in the selection of Securities for safe and profitable investment, their
experience of the markets, extending over a period of more than sixteen years,
together with special facilities for acquiring information, enabling them to act
beneficially for clients.

They have established Corresponding Agencies in all the principal towns of the
United Kingdom, and are prepared to deal in the various local Stocks and Shares
at close prices. Orders per post or telegraph receive prompt attention.

**INVESTORS SHOULD APPLY for a copy of Messrs. W. J. TALLENTIRE and
Co.'s Circular for February, NEXT POST FREE.** It contains valuable information
on Foreign Stocks (especially South American, Egyptian, and Turkish), Railways,
and Lead Mines.

MESSRS. ENDEAN AND CO., STOCK AND SHARE DEALERS,
85, GRACECHURCH STREET, LONDON, E.C.

Government and every negotiable Stocks dealt in for cash or account. Orders
and telegrams punctually attended to.

The Van Mine, returning about 700 tons of mineral per month, paying good di-
vidends, now the East Van having cut rich. The Aberdaunt, on the same lode,
in about 12 fms. sinking is likely to be of equal value, and the shares should be
purchased whilst they can be had so cheaply. They have a longer run on the lode
than the Van or East Van.

Our Bureau and Guide to Investments, with a plan of the Van district, will be
ready for issue on Wednesday next. Price 6d.; free to clients.

**SHARES FOR SALE in the Aberdaunt, Llanrwst, Van, and East Van, and
all the leading Lead Mines.**

MESSRS. J. TAYLOR AND CO., 86, LONDON WALL, E.C.,
and MINING EXCHANGE, SOUTH KING STREET, MANCHESTER,
MINING ENGINEERS AND INSPECTORS.
Business done in all descriptions of Stocks and Shares.
100 ABERDAUNT SHARES FOR SALE.

GROGWINION LEAD MINE (LIMITED).

MESSRS. H. HALFORD AND CO., STOCK AND SHARE BROKERS,
OF EXCHANGE CHAMBERS, 26, CHANGE ALLEY,
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Strongly recommend the ABOVE MINE as one of the BEST and SAFEST IN-
VESTMENTS. The dividends are declared half-yearly—the one for the last half-
year was 15% per cent.; the next one will probably be 20 per cent. The "reserves"
are valued at £200,000. Every information upon application to the above.
A Daily Closing Price List of Mines and other Securities sent post free on applica-
tion.

Messrs. H. H. and Co. are BUYERS of 200 Shares in GROGWINION MINE,
also of 100 Shares in WYE VALLEY LEAD MINE.

MESSRS. HARVEY, JORDAN, AND CO.,
MINING ENGINEERS AND AGENTS, ACCOUNTANTS, AUDITORS,
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ITS SAFETY is evidenced by the total ABSENCE OF ACCIDENTS in transit and storage; it is insensible to heavy shocks, its GIANT POWER being only fully developed when fired with a powerful percussion detonator, and hence its great safety.

As a SUBSTITUTE FOR GUNPOWDER its advantages are the GREAT SAVING OF LABOUR, rapidity and INCREASE OF WORK done, FEWER and smaller BORE-HOLES required, greater depth blasted, safety in use NO DANGER FROM TAMPING, absence of smoke, unaffected by damp, &c.

For information, apply to the—

BRITISH DYNAMITE COMPANY (LIMITED), GLASGOW;
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THE BEST EXPLOSIVE KNOWN FOR EVERY KIND OF QUARRYING, MINING, TUNNELLING, AND SUBAQUEOUS OPERATIONS.

UNRIVALLED FOR STRENGTH, SAFETY, AND FREEDOM FROM GASES.

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THE DARLINGTON ROCK BORER.

No VALVE—BLOW obtained by the movement of the PISTON.
IN USE IN FRANCE, GERMANY, SPAIN, AND ELSEWHERE.

Rock Borers, Air Compressors, and Electric Blasting Apparatus.
Sole Agents and Manufacturers for France.—The Blanz Mining Company,

WHERE BORERS MAY BE SEEN IN OPERATION.

For letter of introduction, particulars, &c., apply to—

JOHN DARLINGTON,
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MINING MACHINERY AND TOOLS.

THE TUCKINGMILL FOUNDRY COMPANY,
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MANUFACTURERS of every description of MINING MACHINERY,
TOOLS, MILLWORK, PUMPING, WINDING, & STAMPING ENGINES.

SOLE MAKERS OF

BORLASE'S PATENT ORE-DRESSING MACHINES AND PULVERISERS.

PRICE LISTS CAN BE HAD ON APPLICATION, AND

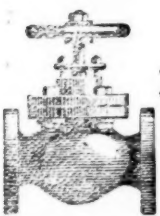
SPECIAL QUOTATIONS WILL BE GIVEN UPON INDENTS AND SPECIFICATIONS.

TUCKINGMILL FOUNDRY AND ROSEWORTHY HAMMER MILLS.
TUCKINGMILL, CORNWALL, AND 85, GRACECHURCH STREET, LONDON, E.C.

ARTESIAN BORINGS,

For WATER SUPPLY to TOWNS, LAND IRRIGATION, and MINERAL EXPLORATIONS, may be executed of any diameter, from 6 in. to 36 in., and to any depth to 2000 ft.,

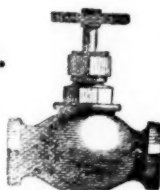
Pistons & Air-pump Buckets fitted with Patent Elastic Metallic Packing
of which upwards of 8000 have been made to March, 1875.



MATHER AND PLATT,
MAKERS OF LARGE PUMPS AND PUMPING ENGINES.
Improved Valves and Taps for Water, Steam, Gas, &c.

PATENT STEAM EARTH-BORING MACHINE
ENGINEERS and MACHINE MAKERS to CALICO PRINTERS, BLEACHERS, DYERS, and FINISHERS.

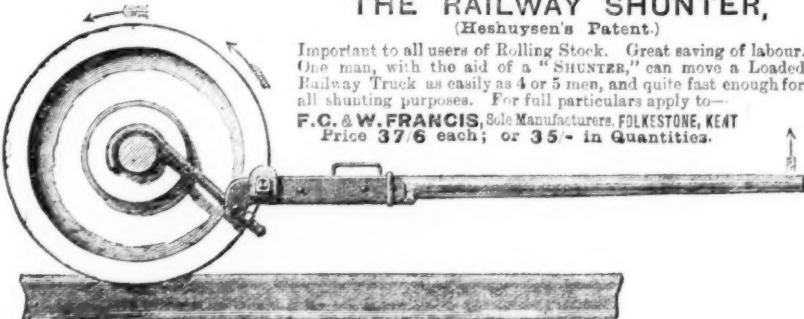
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FOREIGN MINING AND METALLURGY.

Although orders for coal have not reached the owners of the Belgian collieries in a very sustained fashion, the extraction has not been at all slackened, the object being to re-constitute stocks which were reduced during the recent strike. During the last few days cold wintry weather has prevailed in Belgium, and this circumstance has improved the demand for domestic qualities of coal. Coke has been selling in the Liège basin at 16s. to 17s. 6d. per ton, delivered on the trucks near the furnaces. Washed coke has brought 19s. 3d. to 17. per ton. Some official tables of some interest have been prepared in illustration of the progress of Belgian coal mining industry during the last ten years. The coal production of the whole of Belgium in 1865 was 11,840,000 tons; in 1874 it had grown to 14,669,000 tons. In 1865 the average production effected by each working miner was 144 tons, at an average cost of 1s. 3d. per ton; in 1874 the corresponding production was only 134 tons, at an average cost of 1s. 10d. per ton.

The Krupp factory is now constructing a 40-centimetre gun, with a barrel weighing 80 tons, a projectile of 678 kilogrammes, and a charge of 135 kilogrammes of powder for each shot; and also a 46-centimetre gun, with a projectile of 1030 kilogrammes and a charge of 200 kilogrammes. Herr Krupp has now been engaged in the manufacture of steel guns for 30 years. His first 6-pounder was exhibited in London in 1851, and since then he has provided nearly all the European States with guns. His last achievement is a gun of 35½ centimetres calibre, and 57½ tons weight; these guns are to be supplied to the Turkish Government for fortifications on the Bosphorus. The projectile is of cast-steel; it weighs 520 kilogrammes, and, when fired with a charge of 125 kilogrammes of prismatic powder, has an initial velocity of 475 metres.

A terrible explosion of fire-damp in the Joben coal pits has caused great consternation in the surrounding district. Correspondence from the coal districts of the Nord and the Pas-de-Calais continues to indicate a reasonable amount of activity in the extraction. Orders have been tolerably well sustained, but prices have exhibited a slightly downward tendency. The arrival of some foreign miners, and especially Englishmen, has been noticed in the northern French departments; these men have been seeking work either above or under ground. The number of the foreign miners who have been thus seeking their fortunes in the North of France is said, however, to be very limited. The shares of some of the principal French coal mining companies have fallen during the last few months, probably in anticipation of diminished profits; in the St. Etienne district the decline has, however, been less marked than in other localities.

There has been scarcely any improvement in the French iron trade, and the hopes conceived as to the future have not acquired any additional strength. In Germany matters appear to be going from bad to worse, and in the North of France working operations can only be carried on upon condition of ironmasters being willing to do business without profit. Those who can obtain orders for merchants' iron at 7½ per ton consider themselves fortunate. In the Champagne group there has been little activity in casting pig, and this circumstance has naturally exerted a depressing influence upon prices. As regards quotations for pig for refining, they may be said to range between 27. 8s. and 27. 18s. per ton.

A meeting of representatives of Belgian metallurgical and mechanical firms and companies has been held at Brussels, for the purpose of adopting a memorial to the Belgian Minister of Public Works, asking him for orders for rolling-stock and permanent way material for the Belgian State lines. M. Tereelin presided at this meeting, which was attended by about 60 directors or engineers of the most important Belgian establishments. It was agreed to memorialise the Minister to order plant to the amount of from 1,000,000 to 1,200,000. The Minister appears to be disposed to agree in substance to the prayer of the memorialists, since he has just given to sundry Belgian firms an order for 50 locomotives, upon the express condition that the materials required for the production of these engines shall not be purchased abroad. The order has been divided between the Belgian Colliery and Metallurgical Company, the Couillet Company, the St. Leonard Company of Liège, the Seraing Company, the Haine St. Pierre Company, the Belgian Construction Company, and M. Carrels, of Gand. A contract has been let at Brussels for a gasometer of a capacity of 22,000 cubic metres. The accepted tender was that of MM. Nicaise and Deleuve, of La Louvière; the amount of their tender was 13,831. Eight tenders were submitted, and the terms offered were very variable.

Copper has been dull and depressed at Paris. Chilean in bars, delivered at Havre, has made 85½ per ton; ditto, ordinary descriptions, 84½ per ton; ditto in ingots, 88½ per ton; English tough cake, 87½ per ton; and pure Corocoro minerals, 86½ per ton. The aspect of the German copper markets has scarcely changed, at the same time some rather numerous transactions have taken place to meet the requirements of consumption, and prices have been a little firmer. The Rotterdam tin market has been very quiet, with a decidedly downward tendency. Some considerable quantities of Billiton have been dealt in at 47½ fl. Tin has declined at Paris; Banca, delivered at Havre or Paris, has made 91½ per ton; Straits, 86½; and English, delivered at Havre or Rouen, 84½ per ton. The Marseilles tin market has been very quiet, and prices have been weak. The German tin trade has presented only a mediocre interest; prices have experienced scarcely any variation, but the general tendency has been feeble. Lead has been weak and neglected at Paris; French and Spanish have brought 22½ 12s.; and English, 22½ 16s. per ton. The German lead markets have been rather irregular. The Paris zinc market has been weaker. Silesian zinc, delivered at Havre, has made 26½ 12s. per ton; other good marks, delivered at Havre, have brought 26½ 8s. per ton. The Marseilles zinc market has remained without change; rolled Vieille-Montagne zinc in sheets has brought 34½ per ton. The German zinc markets have continued firm.

THE MINES OF EMMA HILL, UTAH.

Emma Hill is one of the famous mineral districts of the West; made so as well by the notoriety of the Emma Mine troubles as by the productiveness of that and other mines in the vicinity. The ore deposits being wholly in limestone, as a camp it has to suffer all the approbrium of that class of mines; yet, though the ores produced are extremely low grade in silver, and the deep winter snows render work exceedingly dangerous during six months of the year, its standing to-day as an ore-producing locality is among the best, and its promise for the future exceedingly good.

Alta City is located at the head of Little Cottonwood canyon, a gorge which breaks down from the Wasatch range towards the West. Emma Hill is a mountain slope on the left or north side of the canyon looking towards the head of the gulch. It occupies a similar position in reference to the town of Griffith Mountain does to Georgetown, or Mammoth Hill to Central, or Monte Lincoln and Bross to the old town of Montgomery. The formation is entirely limestone, through which have broken several dykes of porphyry. From base to crown for a distance of between two or three miles along its face it is pitted with shafts, open cuts, tunnel mouths, and prospect holes of every description, each relieved by its symmetrical dump, and each the present or past centre of great hopes and expectations.

The first conclusion one reaches in looking at the mines is that there is no regularity in the formation whatever, and no systems of veins or deposits. In fact, it is commonly said that a man cannot sink a shaft or run a cross-cut for 50 ft. on any part of the hill without finding ore, and this is almost literally true; but more careful observation shows that there are several belts crossing the face of the mountain, in which almost all the large bodies of ore occur, and which have a well-defined course and bearing. The first and lowest of these is traced in the Emma, Bruno or North Star, Vallejo, South Star and Titus, Flagstaff and Reed and Benson. The second commences in Grizzley Flat, and includes the Davenport, Montezuma, Savage and others. The third is the Prince of Wales group.

The first, or Emma vein, is the largest and most important of the three. It has an average width of about 200 ft.; with a connected seam of ore, but consisting of a succession of chimneys or deposits of all sizes and shapes. Sometimes these are called pipes, being cylindrical in shape. Again they are immense flat vein-like masses, which promise to extend laterally and in depth ad infinitum, but suddenly come to an end; and frequently the ore bodies widen out, and are egg shaped, as the great Emma and Flagstaff chambers, presenting faces of mineral from 10 ft. to 50 ft. in width.

The Emma group has produced since its discovery about \$7,000,000 in silver and lead, and has yielded during 1875 about \$500,000, the Emma itself having been idle during the entire year.

The Davenport group is similar in its formation to the Emma belt. It has yielded about \$2,000,000, and may be credited with about \$300,000 during the past year. It is much shorter than the lower belt, and but little developed.

The Prince of Wales has more the appearance of a stratified or bedded vein. It is probably the remnant of a much larger deposit, the western end of which has been

Nor is this the only object upon which parliamentary legislation

could be beneficially applied, nor the only channel in which much good could be accomplished by our Imperial legislators. Our mining legislation is far from complete, nor is the condition of our factories so perfect that further reforms are unnecessary. True, we have a Truck Act virtually in operation, but practically the snake is "only scotched, not killed," and in many mining districts this iniquitous system is as rampant as ever. If our Government, again, would do its duty it would make better provision for the education of the miners' children; and the various Acts for the regulation of our factories and workshops require careful supervision, and in many respects modification. We have no space to enlarge upon these latter subjects this week, but we have said enough to prove that the condition of our collieries and factories still requires and demands legislative care and attention. The appointment of additional inspectors is one of vital moment, and should be urged with all the force and power at command. Our colliery operations are rapidly increasing both in numbers and importance, and their safe working requires great scientific knowledge and mature judgment. Every proprietor is, doubtless, sincerely desirous of doing his duty towards his men, and needs no further pains and penalties to induce him so to do, but as modern legislation has thought fit to materially increase the onus and responsibility of the owner and manager, it is only fair and right that they should receive that valuable scientific skill and assistance which properly qualified inspectors only can afford, and in order to do this their number must be moderately increased.

MINING AND STOCK EXCHANGE NEWS OF THE WEEK.

Messrs. F. W. MANSELL and Co. (Sworn Stock and Share Brokers), Pinner's Hall, Old Broad-street, write to us as follows:—

WEST PATELEY BRIDGE LEAD MINES (Limited).—This valuable series of mines has all the important physical and natural advantages of the adjoining Pateley Bridge Mines; intersected throughout their entire length (three-quarters of a mile) by the same proved rich productive veins—which can be worked cheaply and economically—capitalised at the same moderate amount (20,000l.), managed by equally qualified officials, and generally without a feature that does not favourably compare with the Pateley Bridge Mines, while there are many essential points strongly in favour of West Pateley. The Pringap, Sun, Lumb, Jarnot, Cleaver, Folly, Hesel, and the Halden veins have nearly all been enormously rich in the Pateley Bridge Mines to a depth of 20 fms. under the joint adit level, and are now being extensively worked, showing courses of ore from 16 to 18 in. in thickness of pure metal, worth at least 50l. per fm.; the ore is found in almost a pure state, requiring little or no dressing. We have the testimony of the resident manager of the Pateley Bridge Mines (Capt. Charles Williams), referring to other lodes, that "the surface workings on the Rake and the Craven cross-veins prove without a doubt that the West Pateley Bridge Lead Mines are a most valuable property, and require only a small outlay of capital to bring them into a permanent and profitable state." By means of the main day level the whole series of mines can be continuously drained to a depth of nearly 60 fms. from surface, rendering available without the aid of pumping machinery a greater extent of mineral ground than can be extracted during at least the present generation. Among the many material advantages possessed by this property for an immediate and satisfactory development is the fact that this main day level has been already driven for a considerable distance parallel with the boundary. All the rich lodes can thus be readily and inexpensively tapped simply by cross-cuts, thereby increasingly profitable returns of lead may be expected almost forthwith. If a group of favourably situated mines, acquired upon most favourable terms, possessing a mass of rich veins, some having yielded enormous profits for more than 100 years, with unusual natural facilities for speedy and efficient development, are the unfailing bases upon which to found a grand and lasting success, West Pateley Bridge Lead Mines are without parallel.

PATELEY BRIDGE LEAD MINES AND SMELTING WORKS.—Personally a long experience has taught us to utterly disregard so-called "rumours" about mines; it is not so with the outside public. Even Pateley Bridge has not escaped; our clients have a large stake in this property, and we are bound to protect their interest, and shall always do so despite the manipulations of what is mis-called "the market." Upon our own responsibility we wrote to the manager, and have received the following reply:—

Pateley Bridge Mines, Pateley Bridge, Yorkshire, Feb. 10.—DEAR SIR: Your favour of the 5th inst. duly to hand, and I note its contents, and beg most emphatically to deny of ever having furnished any false statements respecting the Pateley Bridge property, or attempted to overvalue its produce; and my calculations are based upon over thirty-five years of practical experience in lead mining, and will bear out the strictest investigation. I shall thank you for informing me who is the person that accuses me of making untrue reports, and I shall deal with him as the law directs. Everything that I have said about this mine will be fully borne out in actual results. I have no interest in the mine, therefore I have no ends to gain by puffing it up; but I have no hesitation in saying that the Pateley Bridge will stand at no distant date second to none in the North of England; in fact, the eastern section of the property will make a great mine in itself. The Sun vein, which yielded thousands of tons of ore above the Gillfield level, stands nearly whole under that day level, and is drained by the Eagle level to a depth of 60 fms. under the present workings, and is now in the bottom of our shaft over 5 ft. in width, and opening out into a good course of ore. There are also four other parallel veins equally as productive—Jarnot, Folly, Hesel, and Halden veins. The great feature is that the Jarnot, Sun, and Folly veins underlay south; the Hesel and Halden veins underlay north, and all of them will meet together at a certain depth. In the western part of the mine is the Rake vein, with courses of ore now standing 18 in. thick, of nearly pure galena; and when the engine-shaft is completed all these courses of ore will be available for working with 20 fms. of backs. The east cross-cut will also intersect Fielding's, Sir Thomas, and Green Grooves veins, all of which proved very rich in the levels above. The vein in the west cross cut in the 20 will fall in with the Gulf and Lumb veins, and form itself into a rich course of ore. The Pringap vein is showing good ribs of ore now in the drive, and there are also numerous other important points that will come off in a short time. The fact is the merits of this mine can never be over-estimated.—C. WILLIAMS.

ASSETON AND WEST ASSETON (Lead).—The shares in both these mines continue to attract a considerable amount of attention. To the information already communicated we have only to add that the cross-cut at boundary shaft, in West Asseton, is in 5 fms., and that the lode will be reached in about 2 fms. further driving. The shaft will be down to the 60 in something like six weeks; the ground is very easy and favourable for sinking; set at 14l. per fm. The strong "feeders" or "droppers" continue in the shaft, and it may be mentioned, as indicating the value attaching to the general prospects of the mine, that the working miners employed in the cross-cut are purchasing shares. Possibly this is the best report that can be published.

PORT NIGEL (Lead).—This mine is situated in the Asseton district, in close proximity to Tan-y-Bwlch, where the lode at the deepest part (80 fms.) is worth over 150l. per fathom. The lode in Port Nigel is in the same strata, and has yielded 240 tons of lead during the year (at the rate of 20 tons per month). This output has been obtained from workings about the 44; in Tan-y-Bwlch the lode did not begin to be productive above the 60. At Port Nigel a 56 fm. level has been extended 21 fms. west, the lode averaging from 14l. to 20l. per fathom, the present forebreast yielding a good mixture of lead and blende; the 56 east has been extended 40 fms. through a lode averaging in value from 8l. to 15l. per fathom. The eastern end in this level is approaching the long run of ore ground driven through in the upper level; there are 30 fms. of good ore ground in advance of the 56. The 44 has been extended east 60 fms., and the 56 fm. level west 21 fms. These two points are more than 80 fms. apart; of this distance more than 50 fms. have been driven through good productive ground. The present return from this depth is between 20 and 25 tons per month. The engine-shaft is sinking below the 56; the feature of importance here is that the lode is most promising, producing fine rocks of lead, its component parts being quartz, oxide of iron, or goossan, carbonate of lead, copper, and lead ore. This lode is described as masterly and strong, with streams of water bubbling up from the bottom. Remembering what has been done since the present company commenced operations, and viewing the valuable points to come off in the next two or three months, there is every probability (the manager writes) of this young mine turning out second to none in the Principality. It is the opinion of all practical and scientific men that depth only is required to make Port Nigel a lastingly profitable mine. These shares are in demand at 1½ to 2; there are 10,000 shares. This property will soon command a considerable amount of attention.

ROOKHOPE VALLEY (Lead).—Hitherto our remarks have referred more especially to the situation of these mines, their geological conditions, the great richness of the Beaumont Mines, and the present state and prospects of the "No. 1" Mine. It is to be borne in mind that the previous company during its earlier period, and up to the time nearly the whole of its capital had been expended did not carry out any systematic explorations, therefore the realisation of the results then anticipated may be with confidence looked for at no distant date. From the "No. 1" Mine alone, when placed in an efficient condition of development, the returns should be not less than 100 tons per month. But to bring the entire capabilities of this section of the property into force it will be necessary to sink the No. 1 engine-shaft to the 3-yard limestone (some 18 fms.), and the sinking carried on regularly through the whole of the productive strata to the great winsill. This done, and five or six levels kept going at a rate of 10 fathoms per month respectively, all in courses of ore, not only on Great Red Lode, but on Golden's and the side lodes, Rookhope Valley Mines should soon vie with the best of Mr. Beaumont's mines in the county of Durham.

BLUE TRENT HYDRAULIC (Gold).—Recent shareholders appear unaware that the lineal extent of their property on the course of the channel is something more than a mile, varying in depth from a mere coating of the rim-rock on the north to a maximum of 1000 ft. to the south, consequently has an average depth of 300 to 500 ft. The topography of this region, the relative position of adjacent mines, together with a difference of planes of rim-rock, and the differences in character, texture, and colour of the gravel in the different workings, suggest the idea that this has been the point of confluence of two or more ancient streams, and that the remarkable depth and extent of alluvium found here is owing to the inorganic accumulation of sand and gravel from various directions upon the same focal area; but whatever may be the true explanation of the accumulation of the vast compass of alluvium amassed here, its value has been fully attested by the various washings.

OREGON HYDRAULIC (Gold).—The letter in last week's *Mining Journal* was very satisfactory as showing the rich character of the gravel. This week further intelligence is to hand, from which it would appear that the whole of the machinery was on the ground, and that the Thoss claim was completely fitted, and washing steadily progressing. The preliminary clean-up was entirely satisfactory. The next claim will be ready for washing by the middle of March. Water is in abundance, and everything promises a great success.

CONDES COMPANY OF CHILI (Silver).—In previous notices it has been explained that these mines are situated in the mountain range of the Andes, known as the "Hill of Valenzuela," 38 miles from Santiago, the capital of Chili. The principal part of the road from Santiago to the mines is not sufficiently good for carts, and the traffic is at present carried on by mules; but at a comparatively small expense this road can be made available for carts; this expense would be contributed to by the adjacent mines, and greatly assisted by the Chili Government, always ready to forward the industry and advancement of the country. The geological nature of the ground where these mines are situated is of a granite called "arenita," in which are found many other mines of considerable importance. Some of the lodes cross the mountain from east to west, and then from north to south, causing a series of intersections, where the lodes are always found exceedingly rich. The minerals consist of lead, sulphate and carbonate of lead, carbonate of copper, peroxide of copper, and quartz. The width of the lodes varies from 1 to 50 metres. Up to the present only one mine has been extensively worked; the others have their workings commenced, consisting of a shaft 10 yards in depth, sunk upon the lode. Judging from the appearance of these mines, and comparing them with what the leading mine was at the same depth, there seems no reason to doubt they will eventually prove equally valuable. Practical testimony affirms that the property even in its present early stage of development is capable of returning 300 tons of ore per month from "ends" alone, and is estimated to leave a profit of 10l. per ton; this would give 3000l. per month, or 36,000l. per annum, upon a capital of 70,000l.; in other words, equal to 50 per cent. per annum.

RICHMOND CONSOLIDATED (Silver).—When will be verified by results the announcement cabled by the manager some months since, that "returns will be increased forthwith?" Startling was this announcement: when we had the hardihood to point out, from practical causes, the impracticability of this sensational statement being confirmed by results, and warned our clients accordingly, all sorts of innuendoes were uttered against us. We pointed out that the estimates as to the ore reserves were entirely fallacious, quoting passages from the weekly reports as they appeared in the *Mining Journal* in support of our statement. From then till now the cabled returns have not increased, but, on the contrary, decreased. Upon well-authenticated authority we can state that the mine in its present condition will be unable to yield for many months a supply of ore sufficient to keep three furnaces in full work. The "New Chamber," about which so much has been written, is well nigh exhausted, and the vein in the winze sinking below the 600-foot level (the 700-foot level being the lowest point of operation) is not more than 6 ft. in width. Clearly, where ore had been supposed to exist limestone has been found, and the theories hitherto propounded have been falsified by development. Another item of information with which shareholders should have been made acquainted is that one of the furnaces is in such a condition as to render it absolutely necessary to pull it down. It has been stated that a weekly out-put of less than 840,000 leaves but a small margin of profit; but upon this point we have no information to guide us, nor does it appear that on this side the data is to hand upon which any certain statement can be made. This point is of sufficient importance to demand an immediate explanation.

I. X. L. (Gold and Silver).—As this property will soon assume a prominent position, it may not be out of place to mention that it is situated in Scandinavian Canyon, near Silver Mountain, Alpine County, California, and adjoins the Exchequer Mine; in fact, it forms the southern extension of that property. It was upon the developments in the I. X. L. that the undeveloped portion of the same lodes was taken up by the Exchequer Company. A considerable amount of work has been done in the upper levels, and a large quantity of valuable ore developed, ranging from 80 to 830000 per ton. A shaft has been sunk 200 ft., and a drift driven up to within 200 ft. of the bonanza opened out in the upper levels. Mr. J. J. Cooper and other well-known authorities describe the lode as a true fissure vein. The total capital is 100,000l., in 14 shares. It is estimated that an out-put of 20 tons per day can be made; if only an average of 100 per ton this should be equal to 300l. per day, or (say) between 40,000l. and 50,000l. per annum. The status of the company is beyond question. The shares are quoted ¼ to 1½.

STOCK EXCHANGE GENERAL MARKETS.—Holders of stocks of nearly all kinds have a much greater interest than they may suppose in the possible effect arising from the manner in which it is proposed by the British Government to pay the 4,000,000l. sterling on account of the Suez Canal shares. It seems that the National Debt Commissioners will be required to pay this large amount, and that that the 200,000l. a-year to be received in respect of shares is to be paid over to the Commissioners. The Government will have to pay not more than about 3½ per cent., and the difference between this and the 5 per cent. received is to be used in repaying the loan. It is calculated that in about 35 years the whole advance will have been repaid. But the question in which holders of stocks have an immediate interest is the influence this proposed operation may have upon the money market. Clearly the Commissioners have not 4,000,000l. at immediate command, and, therefore, it may be necessary to sell the stock to supply the required amount. As we have said, this is a consideration which affects the stock markets mainly. Consols are very high, and there are few issues to absorb the accumulating resources of investors, and the success with which the money for the purchase of the telegraphs was raised by the secret sale of Government stock encourages the expectation that only a moderate effect may be produced.

FOREIGN BONDS.—Egyptian stock has been the great pivot around which there has been the greatest amount of speculation during the week. Opinion appears to be gaining ground that the cause of the

present embarrassments of the Viceroy are bad financing and excessive zeal in the construction and encouragement of public works; if the Khedive can be induced to restrain his enterprising spirit it seems tolerably clear that the resources of the country are capable of bearing the burden which rests upon them, but while the future of Egyptian financial affairs seems full of hope it cannot be said to be free from uncertainty. Mexicans have been dull, complaints are with justice made of the years which have elapsed since the so-called committee have met those they are supposed to represent. Statistics show a yearly increase of prosperity since 1856, and it is said that the Mexican Government have been purchasing the bonds.

RAILWAYS.—North British in the early part of the week were prejudiced by less favourable dividend rumours. Metropolitan and Metropolitan District have fluctuated as rumours, favourable or otherwise, were circulated concerning the passenger duty. Towards the close nearly all home railways were flat; the explanation is still less favourable for dividend anticipations. Bristol and Exeter declined on the proposal to pay for the present a dividend of only 14 per cent. per annum on account of the past half-year. London, Tilbury, and Southend stock has also fallen, from which it may be inferred that the result of the past half-year, the first since the termination of the guarantee, is not going to prove very favourable. Grand Trunk securities have further declined upon the proposal to raise 400,000l. new capital by debenture stock.

MISCELLANEOUS.—Telegraph Construction shares have been lower upon the dividend for the past year, being 15 per cent. as against 20 per cent. and a bonus of shares for 1874. Bank shares, including Anglo-Egyptian, Bank of Alexandria, Bank of Constantinople, Bank of New Zealand, and London and County, have severally shown favourable movements. London and Westminster, however, flatter. The Bank rate of discount remains at 4 per cent.

GEOLOGICAL SOCIETY OF LONDON.

The annual general meeting of Fellows for the election of the council and officers for the ensuing year, and for the award of honours, was held at the society's rooms, Burlington House, yesterday.

Mr. JOHN EVANS, F.R.S., President, in the chair. The usual preliminaries having been disposed of, the report for the year was submitted. It appears that the total number of members is 1230, being a net increase, after deducting deaths and expirations, of 58 as compared with the preceding year. The income was described as satisfactory, the revenue having amounted to 3097l. 18s. The expenditure was 3352l. 8s. 9d., showing a deficiency of 254l. 3s. 9d., which was accounted for by extraordinary payments made through the removal of the society's apartments from Somerset House to Burlington House. It was announced that Mr. Ormerod had furnished the MS. for the supplement to his *Geological Publications* of the society, and that Dr. J. J. Bigsby, F.R.S., had given a medal to be awarded annually by the council. At the suggestion of Mr. A. seconded by Dr. Gwyn Jeffreys, F.R.S., an amendment was made in the report that the donation of 200l. from the widow of the late J. Yates was "in lieu of an intended bequest of her late husband," the object being to show that it was not derived from the fund which, by an accidental error of the testator, was appropriated by University College.

The President then called on Prof. Huxley to come forward, and said that it was a source of great satisfaction to place in his hands the Wollaston medal, "in recognition of the distinguished services he had rendered to geological science by his valuable researches upon the paleontology of the vertebrate and on paleontological investigations in general connected with the philosophy of geology." The services of Professor Huxley had been so great that it was scarcely necessary for him to refer to them. For twenty-five years he had been engaged in biological researches which had thrown the greatest light upon the subject of all organisms, but his greatest services to the science of geology had been when, upon three occasions, either as president or acting for the president, he had delivered three addresses, which he wished it were in his power to imitate that afternoon.

Prof. Huxley said that if he had been replying to the searching criticisms by which he had been met in former days he would have thought he had no difficulty in finding words to express himself, but on the present occasion it was quite different. He confessed that he had a constitution which enabled him better to battle with storms than to deal with sunshine, and it was for this reason that he found it difficult to reply to the president's panegyrics. He could assure him that he would not forget this occasion, as he considered the award the highest honour that could be conferred. He knew of no case in which the justice of the council's award had been disputed, and perhaps this was one of the grounds upon which he might have said that it had been rightly conferred in the present case. His endeavour in his contributions to paleontological science had been to attempt to work out Kant's idea, when he spoke of geologists as the architects of Nature, and he felt assured that the settlement of the question of evolution lies within the region of paleontology.

The President called upon Dr. Jeffreys to accept the balance of the Wollaston fund on behalf of Prof. Seguenza, of Messina, to aid him in his paleontological searches, especially in the Sicilian tertiary.

Dr. Gwyn Jeffreys said that, in the absence of the foreign secretary, and one having great regard for Prof. Seguenza, he had the pleasure of offering Prof. Seguenza's best thanks for the award, which would be very highly appreciated by him. He like many other foreign geologists, was not overburdened with titles, and had found great difficulty with the small allowance which he received from the Italian Government as professor in pursuing his paleontological researches. The fund would be of great value to him.

The President, in handing the Murchison medal to Prof. Ramsay for his mission to Prof. A. C. R. Selwyn, the director of the Geological Survey of Canada, "in recognition of his services to Silurian geology," remarked that the award of this medal to Prof. Selwyn was particularly appropriate, considering the extensive work which he had made in the geological department of geology in which he had found great difficulty with the small allowance which he received from the Italian Government as professor in pursuing his paleontological researches. The fund would be of great value to him.

The President, in presenting the Murchison medal to Prof. John Morris, "in testimony of appreciation of his long and meritorious services in almost every branch of geology and paleontology, and to assist him in carrying on his valuable observations and researches," said that this was the first occasion on which the medal and fund, bequeathed to the society by the late Sir Charles Lyell, had been at the disposal of the council; and, in considering the award of it, the council was unanimous in opinion that it was well deserved. In awarding it to him, he might remark that, although from the fact of its recent foundation the medal was presented last, it took equal rank with any of those which the council had to deal with. With the medal they had awarded him the entire fund, and he congratulated him that the liberal terms of the bequest enabled them to do so. Prof. Morris's Catalogue of British Fossils had long taken rank amongst the most useful works connected with geology; his lectures had done much to spread a taste for geology; and in the observations he had made in the course of the discussions which had taken place at their meetings all must have been astonished at the minuteness of his knowledge of every branch of his science, and the surprising retentiveness of his memory, which enabled him to give them all the full advantage of it.

Prof. Morris said that in receiving at his hands the first award of the medal founded by Sir Charles Lyell, he could not express how deeply he felt the distinguished honour the Council of the Geological Society had conferred upon him. With regard to the works of an author so well known as Sir Charles Lyell, and one who had so much enlarged the bounds of geological knowledge, it was unnecessary for him to refer to them, but he must say that it was a review of Sir Charles Lyell which led him to consider a branch of the science in which he had since taken much interest, and it was the indefatigable labours of Lyell that led to the recognition of Hutton's views. As to himself, he felt that the value of the award was much enhanced by associating his name with that of Lyell.

Mr. A. TAYLOR asked the President permission to make one observation in connection with this award. He would have liked it to be mentioned that Professor Morris's name had very constantly appeared in the Transactions, and he had contributed many valuable papers; yet he had contributed in a still larger degree by the great assistance he had given to others in their labours; this assistance, although invaluable, could receive no substantial recognition, but the fact should be recorded, that it might be widely known how much he had done for the advancement of science.

The new council, in which Rev. T. G. Bonney, Admiral Spratt, C.B., Professor Rupert Jones, and Mr. J. D. replaced Messrs. Meyer, Moore, and Sorby, and Professors Tennant and Hughes (the other members being re-elected), were elected, and the officers for the ensuing year were chosen; after which the President read an elaborate and highly interesting address, an abstract of which will be published hereafter.

THE ST. GOTTHARD TUNNEL.—Some curious particulars concerning the piercing of the tunnel through the St. Gotthard are contained in a letter addressed by M. D. Colladon to the French Academy of Sciences. It is stated that the 14,920 metres, constituting its total length (2687 more than that of Mont Cenis), 1784 metres were pierced in 1874, and 2428 in 1875. The maximum annual tunnelling at Mont Cenis was 1635; it occurred in 1870; the St. Gotthard, therefore, exceeds the latter by 935 metres. This is explained by the circumstances that the liquid piston pumps of Mont Cenis did not bring into play more than 1000 litres of water at each stroke, and could not give more than 15 strokes per minute, thus limiting to 8 the number of turns of the machinery. This slowness was made a law for the St. Gotthard engines, performing from 150 to 350 turns per minute. A new system of pumps was, therefore, had recourse to, in which the piston and rod are hollow, and receive through the extremity of the latter a circulation of water inside, that keeps them cool. The air is compressed by three pumps to a pressure of eight atmospheres, at the working rate of from 150 to 200 strokes per minute. The compressed air issues from the cylinders at a temperature not exceeding 40° C., and the oil for the cylinders is from 15 to 20° C. There are at present, at Gotthard, four turbines working 12 small pumps. The quantity of air obtained under the pressure of 8 atmospheres is 1000 cubic metres per hour, and all this machinery occupies a shed having a surface of 350 square

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—W. Phillips, Feb. 17: Operations in the levels are continued by the side of the lode. The stopes generally are looking well. A full report will be given next week.

BELSTONE.—J. Neill, Feb. 12: A Shaft: The 80 fm. level cross-cut south, on cross-course, driven 4 ft.; total distance from shaft, 10 fms. 3 ft. 5 in. The strata are much the same as last week. —C Shaft: The stopes east and west from rise in back of cross-cut north, on No. 2 cross-course, at 40 fm. level, still yields about the same quantities of ore as the some weeks past. Strata around the ore still very conical. Cross-cut north, on No. 2 cross-course above the stopes, is still yielding small nests of ore, and the strata favourable for its production.

—Feb. 16: 80 fm. Cross-cut at A Shaft: The ground continues of the same nature as last reported. Spots and veins of yellow ore are being met with, and appearances augur well for the lode when reached. —C Shaft, 40 fm. level east: In these stopes we have several large veins, or runs of ore, going both east and west and rising upwards. The men are still getting out the same quantity of ore, which is of excellent quality. The ground is so open that we shall be able to get out more men, and so raise the ore in larger quantities. The stopes still look well; in fact, quite as good, if not better, than when first met with, and there is every indication that it will continue. At the 30 fm. cross-cut, north, the men have about 80 ft. more to drive, when they will be immediately over the productive stopes at the 40; and judging from present indications, the same run of ore ground will be met with. When this is holed to the 40 it will give better ventilation, and facilitate the working of the stopes. It will also open up fresh ground for stoping, and if found as productive as below it will add considerably to the value of the lode.

BLUE HILLS.—S. Bennett, A. Gripe, Feb. 12: The ground in the back of the lode in which we are sinking the engine-shaft below the 76 continues favourable for sinking, and is thus far letting out but little water. The tribute pitches continue to yield their usual quantities of tinstuff, without any material change in the quality. The great difficulty with which we have to contend is the very low price of the produce.

BROOKLYN.—T. Kemp, Feb. 17: No. 3 Shaft, North Lode: The part of the lode opened on by the 110 end, west from shaft, is not producing quite so much lead as when last reported, being composed of killas and spar, intermixed with ore, now worth 10 cts. per fathom: the lode here is presenting a kindly appearance, and no doubt in a little further driving it will again improve. This level is being pushed on with all energy. The part of the lode carried by the 96 end, west from Joshua's winze, for the width of the level (4 ft.) is worth 10 cts. of ore per fathom; ground tight for progress. When convenient I intend to put a part of me behind this level to strip the lode down to full width. The men in the stopes over this level are still employed in blasting down the sides in order to fill up the same; this is rather a formidable job, and will take to the end of the present month to get this stoppe into working order. The tributes over the 73, to the east of the shaft, have cleared out all their crestuff, and six men are employed in filling up the stoppe, in order to put the same into working trim. The lode in the pitch over the back of this level, to the west from the shaft, is worth 15 cts. of ore per cubic fathom. —No. 2 Shaft—Middle Lode: The lode in the 52 end, west from Lloyd's cross-cut, has within the last few days much improved, chiefly composed of killas, carrying ribs of steel ore, worth fully 1 ton per fathom—promising lode. The lode in the 41 end, east from shaft, is disordered by a cross-bar of ground, and in consequence is unproductive for mineral at the present; this drive is suspended, and the men brought back to a point of about 3 fathoms from the forebore to cross-cut the lode south to prove its width and value. In cross cutting the lode south in the adit, east from the shaft, the lode is much the same as for some time past, principally killas, spotted with ore. I am pleased to say we have again a favourable change in the weather here, with a good supply of surface water. The hauling and dressing are being pushed on with all possible speed. We shall sample on Saturday next 25 tons of silver-lead ore.

CENTRAL VAN.—H. Francis, Feb. 12: Since my last we have completed the lode or plat on west side of No. 2 caunter lode, and have now begun sinking the shaft, 5 fms. of which I have set at 67. 10s. per fathom, or 32. 10s. per fm. of sinking. The lode is strongly impregnated with carbonate of lime, sulphur, and spots of copper, and is of a most congenial character for bearing lead ore. The level on No. 2 caunter lode I have to-day set to drive at 4. 10s. per fm. for the month, or until the east and west lode is met with, which from observation made by dial has been about the end of the month (March 11). The lode in this end is much of the same character as that just described in the shaft—looking very promising.

—H. Francis, Feb. 17: Since my report of the 5th inst., I have to inform you that our progress has been very satisfactory at both points in operation. The lode or plat on the west side of No. 2 caunter lode, there alluded to, has been completed. The shaft is commenced and now down 5 ft. under the level at this point; the lode, which has a well-defined footwall, contains carbonate of lime, sulphur, spots of copper, and is of a most congenial character for bearing lead ore. We have about 12 fms. to sink this shaft, and then the junction of the caunter and east and west lodes. This opinion is formed from the present underlay of the lode, but the underlays may vary, therefore the depth estimated may be more or less. The No. 2 caunter lode, on which we are driving, is of a precisely similar character to that in the shaft. Our progress has been rapid; I am therefore of opinion that this level will soon intersect the east and west lode seen crossing in the deep adit level (a point of great interest), for although very little or no ore can at present be seen in the lode, it is generally at the junction of the lode, and anticipate ending good, and when it is borne in mind that our operations are being carried on in the same belt of lead, bearing strata as the Van and East Van Mines, we may fairly and reasonably look for good results in the level in the No. 2 caunter lode and in the shaft when it reaches the east and west lode.

CRENVER AND WHEAL ABRAHAM UNITED.—Wm. Thomas, Feb. 16: In the past week we have cut through the lode at the 220, west of Woolf's shaft, and have driven west about 6 ft. on its course; it is a well-defined lode, 3 ft. wide, and will yield fully 3 tons of copper ore per fathom. We have not cut out anything in the 205. We have placed Pelly's shaftmen to drive south, at the 225, east of Vivian's shaft, in order to intersect the lode at this point. The 224, west of Blewitt's shaft, and the 220, west of Richard's, are about the same value as last advised. We sampled yesterday copper ore computed 344 tons.

CWM ELAN (NEW).—W. Goldworthy, Feb. 12: Good progress is being made in driving the 30, west of shaft, but there has been no lode taken down here this week. The same level east, on the south lode, I am glad to say is showing a very promising appearance after being disordered by the cross-course meeting in my last report; present value, 14 cts. of lead and blende per fathom. The same lode on the north lode, will produce 6 cts. of lead and blende per fathom as far as is opened upon; its present appearance is very encouraging, and I am daily expecting an improvement. The winze sinking under the 20 west has fallen off a little in value, now worth 12 cts. of lead and blende ore per fathom. No. 1 stoppe in the back of this level will produce 15 cts. of lead and blende ore per fathom. No. 2 stoppe, 2 cts. of lead and 15 cts. of blende per fathom. The stoppe in the 20, east of shaft, on the south lode, will produce 11 cts. of lead and blende ore per fathom. The stoppe in the same level, on the west lode, will yield 15 cts. of lead and 10 cts. of blende ore per fathom. We have had a very heavy snowstorm this week, and a severe frost is raging, our water-wheels were frozen up yesterday at noon.

CWMYSTWITH.—Feb. 10: Mitchell's level west, on the new lode: Since our last report the men have been engaged in blasting into the north, so as to prove if there was anything of value standing in the side; we are now pleased in being able to state that we have cut into the main part of the lode, the bearing of which is rather more north than we have hitherto seen it, but still strong and masterly, composed of clay-slate, blende, and ore, worth of the latter 10 cts. per fm. —a nice lode. At Mitchell's level east, on the new lode, the lode is 4 ft. wide, worth 10 cts. of lead ore per fathom; the ground troublesome for driving. The men are making fair progress in driving Gill's and Rosa cross-cuts. The rise, stopes, and tribute pitches are still producing about the usual quantity of ore.

DEVON GREAT CONSOLS.—J. Richards, Feb. 17: Wheal Maria, Gard's Engine-Shaft: In the 50 west lode is 2 ft. wide, and produces a little ore. A rise in Jackman's is being put up in the back of the 28 west, on the south part of the lode; it is worth 2 tons of ore or 13. per fathom. —Wheal Josiah, Richard's Engine-Shaft: In the 50 west lode is 2 ft. wide, and produces a little ore. A rise in Jackman's is being put up in the back of the 28 west, on the south part of the lode; it is worth 2 tons of ore or 13. per fathom. —Wheal Emma, Thomas's Engine-Shaft: There is no alteration in either the 215 or 145 east, which are still driving by the side of the lode. The lode in Staddon's rise in the back of the 50 east is 5 ft. wide, and still worth 7 tons of ore or 35. per fathom. The lode in the 200 east is 4 ft. wide, and still worth 8 tons of ore or 40. per fathom. In the 145 east the lode is 5 ft. wide, and worth fully 7 tons of ore or 35. per fathom. In the 130 east the lode or part thereof carried, 3 ft. wide, is still worth 4 tons of ore or 12. per fathom. In Welsh's winze the lode being stripped down below the 115 east is still a good course of ore, worth 12 tons of ore or 60. per fathom.

DYLIFFE.—E. Rogers, Feb. 13: Dyliffe Lode: In the 120, east of boundary shaft, the lode when last taken was 10 ft. wide, and produced a little ore. At the present time we are driving by the side of it for dispart. In the rise in the back of this level the lode is 3 ft. wide, worth 14. per fathom. In the 105 the excavation is made for the bob pit, and the men are now engaged cutting hitches for the engine to fix the balance bob. In the 50, driving east of the winze, there has been no alteration since it was last reported. —Llechweiddu Lode: In the cross-cut driving north towards Esgrigall lode, the ground is hard, and the progress slow. We are sampling to day 80 tons of lead, for sale on Feb. 23.

EAST BASSET.—R. Pryor, E. Adams, Feb. 15: The lode in the 41, east of cross-cut is worth 15. per fathom, and in the stopes in the back of this level the lode is also worth about 15. per fathom. No other change since our last week's report. Friday next being our pay and setting day, a full report shall be sent you.

EAST DARREN.—Feb. 15: In the 130, west of Skinner's shaft, the lode is 4 ft. wide, still disordered by cross joints, and the present value is 8 cts. of lead ore per fathom, but looks promising for an early improvement. In the cross-cut south at the 115 nothing of value has been met with, and we have suspended driving the same at present; we have placed the men to drive the 115 west, on south part of lode, which is large, composed of a light clay-slate, carbonate of lime, and spots of copper and lead ore, yielding of the latter saving work for dressing; by continuing this level 6 fms. we shall communicate to a short cross-cut south of the 115, when we shall be in a position to sink under this level, and drive eastward under the ore ground to meet the 130 west. In the drift west of stoppe, over the 92, the lode is 2 ft. wide, but not looking so well as when last reported, now yielding 10 cts. of lead ore per fathom. The stoppe and pitches throughout the different levels are without change to notice, yielding their usual quantities of ore. We did but very little last week towards drawing, in consequence of the ore breaking and carrying away the timber supporting ground in shaft, causing damage which took us three days to repair, and we are pleased to say we are in full work again. The dressing has also been much retarded during the past week, in consequence of frost and snow.

EAST TYWARTHILL.—J. Champion, Feb. 16: The lode in the 9, driving east, is 2 1/2 ft. wide, producing large stones of copper, from 1 to 2 cts. in a stone, which from an assay made gives a produce of 12 per cent. of copper without any dressing. The same lode is producing 1 ton of ore mixed mounds per fathom, and is improving as we drive; the channel of ground in the ore is a light bluish, tinged with green within the joints or leads. The winze sinking 6 fms. behind this end is now down 4 fms. 3 ft.; the lode is from 4 to 5 ft. wide, producing 6 tons of rich white arsenical mounds, and containing several ounces of silver to a ton, and is also producing some rich stones of copper, and is improving every foot we sink.

I have not the least doubt but that we are on the back of a great deposit of copper, and hope in a short time to get down on it. I am still of the same opinion as when we first commenced to work this mine, for I never saw a lode with such fine mineral gossier, and embedded in such a favourable channel of ground, fall to produce large quantities of mineral. We have now all three quarters of a mile on the course of the lode in whole ground; I have had the Tywarthill adit examined, and think with a small outlay we can get into the deep adit and on the lode, which is the same we are now driving and sinking the winze on in East Tywarthill, which will prove our mine 20 fathoms deeper than we are at present, and give backs of 70 fathoms to surface. We have about 17 tons of copper ore ready for market, and from 40 to 50 tons more ready for crushing.

EAST VAN.—W. Williams, Feb. 17: Cross-cut B is in 20 ft. 6 in. I am glad to inform you that the end to-day looks all that we could wish it, and I think we may rely upon cutting a productive lode when we intersect it, which I expect we shall do about this week. The new shaft is in good course of sinking, and we are having occasionally good spots of lead in the country rock, which I consider to be a good indication.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., Feb. 12: The 117, east of King's engine-shaft, is without change since last reported; the men have been engaged in blasting to make the communication of the 95 winze with the 105. The lode in the sink below the 117 is 3 ft. wide, worth 9. per fathom. The lode in the stopes in the back of the 117 is worth 15. per fathom. The stoppe in the bottom of the 105 is worth 7. per fathom. The stoppe in the back of the same level is worth 6. per fathom. The winze sinking in bottom of the 95 is by the side of the lode, in ground good for progress. The lode in the stoppe in the back of the 95 is worth 12. per fathom. The ground in the cross-cut going into the north part of the lode, in the 82 east, is chiefly composed of capel, spar, and mounds, intermixed with good-quality copper ore. The stoppe in the bottom of the 82 is worth 8. per fathom. The tribute department is without change.

GLYN.—James Roach, Feb. 17: The winze on north part of lode has been communicated with the 15, 20 fms. deep from surface; in sinking this we had very fine specimens of lead ore, and also in driving the cross-cut through the lode. We are now driving east and west of said cross-cut, on lead-bearing part of lode; both ends are very promising, and the western one yields good pieces of ore. The component parts of this great lode—41 ft. in width—are all that can be desired for the production of large quantities of lead; this afternoon I have instructed the men to carry out some work in the shaft, preparatory to sinking it 15 fms. deeper, which I will urge forward with all possible dispatch. We have had a considerable quantity of gas issuing from the lode during the last week; this was always the forerunner of lead in the Van.

GREAT RETALACK.—J. Harris, Feb. 12: In the 45 east the lode continues large, and worth about 5 tons of blende per fathom. The stoppe above the 45 east is worth from 4 to 6 tons per fathom. No change in the 45 west.

GREAT WEST VAN.—W. Bramwell, Feb. 15: I have just come up from underground, and am pleased to say that the lode is a very promising lode, composed of beautiful white ore, and of lime and lead ore, and is very strong, with strong feeders of water percolating out of the small vugs as we are taking down the lode, worth 1 ton per fathom. We have cut another branch of spar at the 34 north cross-cut, which is going in the same direction as the cross-cut, with more water than usual; we did not cut any branches going in this direction before, which I hope will lead to a change. The men in Eliza's shaft have been prevented sinking for a few days the latter part of the week on account of the severe frost and snow. I am glad to be able to say that they are in full working order now. At the eastern part of the lode, the rough weather has prevented the men opening much upon the lode since my last. All other work going on as usual. Machinery working well.

GUNSLAKE (Clitters).—Wm. Skewes, J. C. Seecombe, Feb. 16: The shaftmen are making good progress with their work in the shaft, and all the other places continue to yield the usual quantity of copper ore as last reported. We are getting on as fast as possible with the next sampling.

HINGTON DOWN CONSOLS.—J. Richards, Feb. 17: Bailey's Shaft: The portion of the lode in the 160 west is 2 ft. wide, and continues to produce stones of tin and copper. The lode in the 150 west is 2 ft. wide, composed of mounds, quartz, pusch, and a little ore. In Rowe's winze, sinking below the 150 west, the lode for the length carried (10 ft.) is worth 5 tons of ore, or 20. per fm. Nicholls's winze, below the 150 west, continues a good course of ore, worth for the length carried (10 ft.) 18 tons, or 80. per fathom. The lode in the two stopes, in the back of the 150 west, is worth 8 tons of ore, or 24. per fathom. In the 140 west the lode is 3 ft. wide, and produces a little ore. The lode in the stopes in the bottom of the 140 west, and west of Cocking's winze, is worth 7 tons of ore, or 24. per fathom. To drive the cross-cut under the 118, east of Salsbury adit, by four men, at 4. per fathom; worth 5 tons per fathom. The lode in the four stopes in the bottom of the 120 west continues to be worth 10. per fathom. The lode in the stoppe in the back of the 110 west is worth 4 tons of ore, or 12. per fm.

ILLOGAN.—Richard Pryor, Feb. 16: The ground in the deep adit cross-cut is very spare for driving, owing to its being so wet. The ground in the end is strongly mineralised. This end was set on Friday last to four men, at 8. 10s. per fathom, and to all appearance we are very near the lode or branch.

LADWELL.—A. J. Harris, Feb. 17: There is no change here of note since my report of the 12th inst. We have set 20 tons of lead ore for 370. 12s. 6d.

LLANRHADAR (Lead).—E. Pascoe, Feb. 15: During the past week the deep adit has been yielding a little spar, impregnated with lead; the ground is also a little harder than usual, and looks more favourable for a change. In the level west of winze, below No. 4, the rib of ore discovered is going towards the north part of the lode, in a rather oblique course. We have taken the lode down to-day, and I am pleased to say that it continues to look well, worth about 45. per fathom. The stopes over Nos. 4 and 4 1/2 are about the same in value as when last reported. To sink the lode in the 100, east of the cross-cut through the lode. We have commenced to carry ore to the station, and hope soon to have a parcel ready for market.

MARK VALLEY.—James Seecombe, James Stenlake, Francis Renals, Feb. 11: Setting Report: To drive the 145 cross-cut south, from Salsbury shaft, by nine men, at 20. per fathom; ground hard granite. To drive the 136 west, on Markes lode, by four men, at 12. per fathom; worth 13. 5s. per fathom. To stoppe Markes lode in the back of the 134, by two men, at 3. 5s. per fathom; worth 2 tons per fathom. To drive the cross-cut under the 118, east of Salsbury adit, by four men, at 4. per fathom; worth 5 tons per fathom. To sink the lode in the 100, by four men, at 6. per fathom; worth 8 tons per fathom. No. 1 stoppe in bottom of the 80, on Rosedown lode, by four men, at 6. per fathom; worth 5 tons per fathom. No. 2 stoppe, by four men, at 4. 5s. per fathom; worth 4 tons per fathom. To stoppe the south part of the Rosedown lode, in the bottom of the 30, by four men, at 6. per fathom; worth 5 tons per fathom. To drive the cross-cut under the 118, east of Salsbury adit, by four men, at 4. 10s. per fathom; worth 5 tons per fathom. To stoppe Rosedown lode, in the back of the 60, on Rosedown lode, by three men, at 1. 5s. per fathom; lode small, with stones of ore. To stoppe Rosedown lode in the bottom of the 60, by four men, at 5. 10s. per fathom, worth 3 tons per fathom. No. 1 stoppe in the back of the 60, on Rosedown lode, by four men, at 3. 5s. per fathom, worth 4 tons per fathom. No. 2 stoppe, by four men, at 3. 5s. per fathom; worth 3 tons per fathom. To drive the 50 west, on Rosedown lode, by two men, at 6. per fathom, worth 10. 10s. per fathom; worth 3 tons per fathom. To stoppe Rosedown lode, in the back of the 50, by four men, at 5. 5s. per fathom, worth 1 ton per fathom. No. 2 stoppe, in back of the same level, by six men, at 6. per fathom; worth 4 tons per fathom. To stoppe Rosedown lode, in bottom of the 40 fathom level, by four men, at 4. 5s. per fathom, worth 4 1/2 tons per fathom. To stoppe Rosedown lode, in back of the 40, by two men, at 4. 10s. per fathom; worth 2 tons per fathom. To drive the 30 east from cross-cut, by four men, at 12. per fathom; worth 5 tons per fathom for bread and carriage. To stoppe Rosedown lode, in bottom of the 30, by four men, at 4. per fathom; worth 5 tons per fathom. To drive the 20 west, on Rosedown lode, by four men, at 10. 10s. per fathom; worth 2 tons per fathom. To sink the winze in bottom of the 20, on Rosedown lode, by six men, at 12. 10s. per fathom; worth 11 tons per fathom. No. 1 stoppe, in back of the 20, on Rosedown lode, by four men, at 6. 10s. per fathom; worth 5 tons per fathom. No. 2 stoppe, by four men, at 6. 10s. per fathom; worth 6 tons per fathom. To drive Salsbury adit west, by four men, at 8. 10s. per fathom. To sink new winze-shaft by nine men, at 25. per fathom—ground without change. A pitch in back of the 100, on Markes lode, by two men, at 12s. 6d. in 12. A pitch in back of the 50, on Rosedown lode, by two men, at 6s. in 12.

MONYDD GOIRDDU.—R. Rowe, Feb. 17: The 12 east, on the south lode, is of the same value as last reported—30. per fathom. We are just piercing the main lode here, the result of which will be known by next reporting day; appearances are good, and from the fact of this end draining the winze, I am hoping that the lead we are opening on here is connected with that passed through in the winze, and so when this section of ground is opened, which will be within a month, our position will be much improved. Good progress is made driving the 20 west, through the main lode; there is a change in the ground here since my last, and the water continues to increase. I hope soon to be able to write something good from this point. The winze shall be resumed in a day or two, and forced through to the level below with as little delay as possible. The three stopes have increased in value on last week. These stopes, as will be seen by last week's report, were then valued at 15 cts. of lead per fathom, and from appearances in the one under the adit on the south lode, we are anxious to see the same in the other. The lode in the 100, on Markes lode, by two men, at 12s. 6d. in 12. A pitch in back of the 50, on Rosedown lode, by two men, at 6s. in 12.

NEW CHIVERTON.—James Trewatha, Feb. 17: The engine-shaft is down 13 fms. 2 ft. below the 35, lode worth 10. per fathom. The 35 north and 35 south are being driven by the side of the lode. The lode in the adit is composed chiefly of gossan, which is embedded in a good stratum for the production of lead. No change to report since last week's report. —To sink the lode in the 20, east of Thomas's shaft, by four men, at 3. per fathom; we have about 4 fms. more to rise to communicate the old stoppe, where the lode is worth 26. per fathom. To stoppe the back of the 20, west of Thomas's shaft, by two men, at 6s. per ton of stuff; the lode is 3 ft. wide, worth 14. fathom. To stoppe the back of the 30, west of Phillips's engine-shaft, by two men, at 1s. per ton of stuff; the lode carried is 4 ft. wide, worth 25. per fathom. To stoppe the bottom of the 10, west of Thomas's shaft, by four men, at 6s. per ton; the lode is 5 ft. wide, and worth 25. per fathom. To stoppe the back of the 50, west of Phillips's engine-shaft, by four men, at 4s. 6d. per ton; the lode is 3 ft. wide, and worth 20. per fathom. To stoppe the back of the 74, west of Phillips's engine-shaft, by six men, at 6s. per ton; the lode is 5 ft. wide, worth 20. per fathom. To stoppe the back of the 20, east of Broadgate engine-shaft, by eight men, at 5s. per ton of stuff, the lode is 4 ft. wide, worth 30. per fathom. All surface work is being pushed on with the utmost speed.

NEW HENDRA.—W. Rowe, Feb. 14: Pay and setting report of the 12th inst. The deep adit set to drive by two men, for the month, at 8. per fathom; the lode is improving in size, and producing good stones of copper ore, and I am glad to say our prospects are better than they have been for a long time.

NEW NORTH POOL.—W. C. Vivian, P. Clymo, Jan. 17: The lode in 40 east is 4 ft. wide. The branches of the lode producing the rich specimens of copper which appeared when you were last written to be striking off from the lode and to the south of it is now keeping about the same course as the other parts of the lode. The principal part of the water coming from the lode is now issuing from this branch, and this, together with the character of the lode generally, would seem to indicate further improvement.

NEW ROSEWANE.—E. Hosking, W. Bennett, Feb. 12: We have to-day set the following bargains:—To drive the 67, west of Pool's shaft, by six men and two boys, at 4. 10s. per fathom; the lode has improved, and is now 2 ft. wide, worth 12. per fathom. To stoppe above the 67, east of rise, by six men, at 3. per fathom;

the lode is worth 7. per fathom. To drive the 68, west of Pool's shaft, by four men and two boys, at 5. 5s. per fathom; the lode is 2 ft. wide, yielding a little copper ore, and presents a kindly appearance. To rise above the 58, west of Pool's shaft, by two men, at 3. 10s. per fathom; the lode is 1 1/2 ft. wide, producing a little lead and grey copper ore. To drive the 45, west of Pool's shaft, by four and one boy, at 3. per fathom; the lode is 1 ft. wide, and worth 8. per fathom. To rise above the 46, west of Pool's shaft, by two men, at 2. 10s. per fathom; the lode is 1 ft. wide, worth 5. per fathom. We have also set one pitch to three men at 1s. in 12. 9 fathoms below the 121, and, as you know, is being carried down on the cross-cut of the lode. When we commenced to sink in August last the lode was composed of small as to be hardly traceable, and continued so about 4 fathoms, when it commenced to open in the south end to 6 inches wide, and, as miners term it, it showed signs of life, there being a little lead as we have said. The lode has widened out gradually to 3 and 4 ft. wide in the south end, and which is now judging from the but not so wide in the north end, and yielded some rich ore, but in present size irregular form. I should here state that the sinking of the shaft is carried on first by going down in the rock by the footwall for a little distance, leaving the lode standing up, and to be taken down by itself. This is done about 10 fms. wide, and so far since the improvement the lode has had to encounter some of the beds of hard quartz, between which it has yielded far the most ore, sometimes at the rate of from 1 to 1 1/2 ton of lead per fathom, and the last taking down showed a value of from 15 cts. to 1 ton per fathom, and the ore is now extending through the shaft further north. This improved lode is coming in from the south, and such being the case, I would refer shareholders to the plan of the mine, in which they will see in the earlier stages of the mine in shallower levels, and several detached pipes of ore altogether south of the north shaft, and reaching considerably beyond the south shaft (similar small deposits or pipes of ore, and beds of hard quartz, between which it has yielded far the most ore, sometimes at the rate of from 1 to 1 1/2 ton of lead per fathom, and the last taking down showed a value of from 15 cts. to 1 ton per fathom, and the ore is now extending through the shaft further north. 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With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Original Correspondence: Dynamite, and the Railway Companies; the Ventilation of Coal Mines (C. Colwell); Explosives, and Merchandise; Rosway's Process for Treating Metallic Substances; Cape Copper Mining Company; Canadian Minerals—Plumbago; Swedish Iron Ore; Mining in Queensland; Improvement in Taxation (A. Crestadoro); Lead Mining (Robert Knapp); "Circular Mining"—Wolves in Sheep's Clothing; Wheel Grenville (T. B. Laws); Parys Mountain; Old Treburget; New Consols; Pennerley Mine; Dudley Great Consols; East Brookwood Copper Mine; Buckfastleigh (George Spark); "The World's Richest Mine"; Rich Gold Mine; Mining in Australia—Monthly Summary—Australian Mines—Patent Matters; Meetings of the English and Australian Copper, Kirk Michael, South Condurrow, Botallack, and Dolcoath Companies, &c.

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, FEB. 18, 1876.			
IRON.	£ s. d.	£ s. d.	TIN.
Pig, s.m.d., f.o.b., Clyde, 3 0 9			English, ingot, f.o.b., 81 0 0
" Scotch, all No. 1, 3 2 8			" bars, 82 0 0
Bars, Welsh, f.o.b. Wales 6 7 6			" refined, 84 0 0
" in London, 7 2 6			Australian, 78 0 0
" Stafford, 8 15 0			Ranca, 86 0 0
" in Tyne or Tees, 7 0 0			Strait, 77 0 0
" Swedish, London, 15 1 0			
Bills, Welsh, at work, 5 15 0			QUICKSILVER.
Railway chairs, 5 15 0			Flasks of 75 lbs., ware, 10 10 0
" spikes, 5 15 0			
Sheets, Staff., in London 11 0 12			COPPER.
Plates, Staff., in London 10 15 12			Tough cake and ingot, 84 0 0
Hoops, Staff., 9 15 0			Best selected, 88 0 0
Nail rods, Staff., in Lon. 8 5 0			Sheets and sheathing, 91 0 0
			Fat Bottoms, 94 0 0
			Wallerose, 85 0 0
			Burra, or P.C.C., 83 0 0
			Other brands, 86 0 0
			Chili bars, g.o.b., 79 0 0
			BRASS.
			Wire, 9 1/4 d.
			Tubes, 9 1/2 d.
			Sheets, 9 1/2 d.
			Yellow metal sheathing, 7 1/2
			Nails composition, 9 1/2
			TIN-PLATES.*
			Charcoal, 1st quality, 1 9 0
			" 2nd quality, 1 5 6
			Coke, 1st quality, 1 3 0
			" 2nd quality, 1 1 0
			Black, per ton, 17 0 0
			Canada, 1st quality, 15 0 0
			Black Taggers, 450 of 30 0 0
			14 x 10, 30 0 0

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; 1X 6s. per box more than 1C quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—The week has passed without effecting any notable change in the condition of metals. Buyers and sellers alike stand aloof from important commitments. The former because there is too much uncertainty regarding the future to tempt them to buy for stock, for shipments, or for speculative purposes, and the latter because at current quotations, taking metals all round, there is no inducement to press sales. With wages and the cost of raw material as they now are, it is not likely that prices to be remunerative can fall much below present quotations. Manufacturers have reduced their make so far as they can, just to meet the very limited current demand, and before a brighter condition of affairs can be expected, either a brisk demand at existing rates must spring up, the indications of which are not very apparent at present, or a lower rate of wages must rule, so as to materially reduce cost price, and thus enable our manufacturers to compete successfully against foreign markets. Bank rate stands at 4 per cent.

COPPER.—This metal has been very quiet throughout the week, and prices have tended downwards, but without resulting in any very material depreciation. Chili bars being quoted about 79/10s. 79/5s. On Thursday the Chili charters for the first fortnight in February were announced to be 1900 tons, composed of 950 tons bars and 950 tons ore and regulus for England, and 600 tons bars for France. A moderate business in bars resulted at fractionally lower prices, f.o.b., changing hands at about 79/; Wallarose and Burra quoted 88/. To-day the market is very quiet indeed, and lower prices will have to be accepted in order to bring about business.

IRON.—The report from South Wales this week presents no immediate encouragement. Orders do not come forward from the various quarters, both at home and abroad, from which such are usually expected, and by which in ordinary times the market is supported. Contracts already booked for the colonies afford partial employment to the Welsh district, and it is hoped that these, and what other orders may be obtained until the opening of the northern ports as the spring advances may suffice to maintain the works in such employment as now exists. So soon as these ports open for navigation, expectations are held out that orders for rails may be looked for, but it is by no means certain that these expectations will be realised. As regards the position of some of the works, the establishments have already been organised upon a reduced scale, while in others reductions are contemplated as an imperative necessity, and the real condition of trade is now so apparent that the men, instead of standing out for what they deem their rights in the execution of a full rate of wage, are in many instances prepared to carry on work at the sacrifice of those rights, rather than risk notice of dismissal. Upon these grounds, therefore, the only department of the trade which continues to show signs of healthy activity is plates for ship-building purposes. The demand is maintained, and prices are strongly held upon a basis of 8/1, and rails 8/15s. From advices lately received from America we learn that ready-made English rails, lying in New Orleans, are offering, duty paid (which amounts to 8/1 per ton), at 8/5 currency, or about 6/4. per ton. This is not encouraging, so far as our rail trade with America is concerned, for upon the supposition that the cost price in England is 6/10, and freight and insurance to America, together with duty, amounts to probably between 8/1 and 8/2 per ton, the result is that rails are at the moment a drug in the American market.

No real improvement can be expected in the iron trade of this country until the masters and men have arrived at such a mutual understanding as shall prove sufficiently solid to withstand the efforts of the disaffected, and no temporising measures will ever effect this. The root of the evil must be dealt with at all costs. Much, very much, valuable time has already been lost in vain endeavours to come to an agreement; but all plans, suggestions, and attempts have signally failed in restoring the trade to a condition of ordinary prosperity, and if matters are permitted to proceed as they have been, the trade will become yet more depressed, and the effort to restore it will be proportionately greater. Let the consequences be what they may, it would be far wiser to have recourse to decided measures than to go on indefinitely drifting towards a condition of utter prostration. The Scotch pig iron market is quiet, and has been so throughout the week. The opening price on Monday for warrants was 60s. 10/4d., about which price pigs have remained till Wednesday, when they showed a tendency to decline, and business had been reported down to 60s. 6d. To-day the market is steady, at 60s. 7/4d. to 60s. 9d. cash, and 60s. 10/4d. one month.

SHIPMENTS.

Week ending Feb. 12, 1876.	Tons	7,994
Week ending Feb. 13, 1876.	Tons	7,792
Increase		202
Total decrease for 1876		11,772

SPELTER.—Common Silesian has changed hands at 25/5s. in warehouse in London, and special brands at outports have realised 25/15s. ZINC.—A parcel of 75 tons London rolled was sold at 29/1, and 5 tons 2s. 6d. higher.

LEAD.—The market is inanimate. Good soft English pig is quoted 22/10s. 22/5s., and soft Spanish, without silver, 21/12s. 6d. to 21/15s. QUICKSILVER.—The market being dull at 11/1, sellers have reduced the official quotation to 10/10s., which is now the price.

TIN.—The market has been sluggish throughout the week, and prices have tended downwards in regard to every description of tin. Legitimate demand does not suffice to sustain the market, and there is no speculative movement to affect prices. There are sellers of Straits at 77/1, and of Australian 20s. under. Business is reported this evening in Australian at 76/1, and Straits is quoted 77/1. The immediate cause for the present depression is to be attributed to the arrivals from Australia, which have been large, and the desire of holders to quit themselves of some of their stock.

THE IRON TRADE. (Griffiths's Weekly Report).—Friday Evening. We report a reduction in the price of g.m.b. pig-iron at Glasgow this week of 7 1/2d. per ton. This day week the price was 61s. 3d. This afternoon the Glasgow market was idle, and closed rather sellers at 60s. 7 1/2d. We quote makers No. 1 iron: Gartsherrie, 72s.; Coltness, 74s.; Calder, 73s.; Langloan, 72s.; Summerlee, 70s.; Monkland, 62s.; f.o.b. Glasgow; Glengarnock, 68s.; Eglington, 61s. 6d.; f.o.b. Ardrossan; Shotts, 72s.; f.o.b. Leith; Kinnell, 65s.; f.o.b. Deerness. We have very little

change to notice in the London iron market this week. The kinds of iron most in demand are the best brands of bars. In common iron the Belgians are doing a large business—in construction iron of all sorts, so indispensable now in the erection of buildings here. The demand for sheet-iron is less brisk. The general market continues quiet and steady, and the makers on the Tees are obtaining higher prices for ship-plates, which is a good indication for the Cleveland district. The Barrow Shipbuilding Company received an order last week for two large iron steamers, which will carry enormous guns. These warriors will consume a great quantity of plates and angles, and give an impetus to the trade at Barrow-in-Furness. We hear the workers in the steel rolling-mills are about to consent to the reduction in wages proposed by the manager. A large meeting of the Ironmasters' Association was held at Birmingham yesterday, to follow up the former propositions for a Board of Conciliation, and passed a resolution which, it is believed, will meet the requirements of the Black Country. We have authentic advices from Germany, which represent the iron trade there to be in a deplorable condition. The tin-plate makers have given notice in Wales for a reduction in wages to all the workers in black-plate, from the raw material to the finish.

The Glasgow market continues weak, and prices a shade easier. The same remark applies to the Middlesbrough market on Tuesday last. On the other hand, the raw material on the Barrow Exchange on Monday, and at Birmingham on Thursday, was firm. Engineering shops brisk; heavy foundries not so active. Rail trade much depressed—no orders. Steel rails better, no orders given out but future prospects bright. Tin-plate trade very dull, but improvement expected by the end of the next month. The present undecided and apparently weak state of the iron markets will not surprise old ironmasters who have been in the trade during their lifetime. The great reduction of prices during the last two years must of necessity cause perturbation, disappointment, and loss to the makers. Standard bars are reduced from 16/1 to 10/1 per ton, and other sorts in the same proportion. This great depreciation has created changes in the prospects of all new works abroad, and will in the end curtail production.

We are pleased to observe brighter prospects in America. It appears very plainly now that the very large amount of Railway Bonds which were turned out of the "Exchange, in Wall-street," during the panic on suspicion of unsoundness, having passed through a long probation, are now coming into favour. The dividends on these stocks having been paid, the consequence is that railway credit and general credit in the United States is improving, and all railway stocks are gradually rising in the market. This looks well, and clearly indicates a gradual but certain improvement in the credit of the trading community on the other side of the Atlantic.

COPPER.—(Harrington, Horan, and Co., Liverpool).—Arrivals here during the fortnight of West Coast, S.A., produce: Valparaiso, from Valparaiso, 490 tons bars. At Swansea: Rose of England, from Carrizal, 600 tons regulus; Silurian, from Carrizal, 725 tons regulus. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, we estimate at—

Ores.	Regulus.	Ingots.	Barilla.
Liverpool	3829	874	508
Swansea	—	783	—
Total	3829	9547	508

Representing about 11,775 tons fine copper, against 12,582 tons Jan. 31; 12,247 tons Feb. 15, 1875; 21,900 tons Feb. 15, 1874; 24,900 tons Feb. 15, 1873. Stock of Chili copper in Havre, 1050 tons fine. Stock of Chili copper at sea and chartered for to date, 19,937 tons fine. Stock of foreign copper in London, chiefly Australian, 5247 tons fine. According to the Board of Trade returns the total imports and exports into and from this country for the first month of the following years, were—

IMPORTS.	1874.	1875.	1876.
Copper in ores	1549	380	993
Do, regulus	1270	2139	1583
Bars, cake, and ingots	3085	4068	2121
In pyrites, estimated	944	1110	1406
Total imports	6748	7697	6093
EXPORTS.	1874.	1875.	1876.
English copper—wrought and unwrought	1549	1993	1518
Foreign copper—unwrought	1111	1208	1515
Yellow metal	782	775	989
Total exports	3442	3976	4022

Messrs. Henry Rogers, Sons, and Co.—COPPER: The West Coast charters for the first fortnight of the current month were called on Feb. 17 at 1900 tons fine copper, 1900 tons only being for England; the market for copper had been dropping for some days previously, and bars looked like going to 78/. For the moment any further fall seems to be arrested, but the trade is completely confined to daily wants that no permanency in prices can be hoped for. The continued downward course of the Indian Exchange very materially affects the Eastern demand for manufactured as well as yellow metal, and these are both cheaper in consequence. English copper is neglected, and fine sorts of Australian find buyers only in limited quantities and at continually lower prices.—TIN: The fluctuations in this metal have been but slight to within the past day or two, when heavy arrivals began to tell upon an already overstocked market, and we have a drop of fully 20s., with but a poor demand at the present time.—SPELTER: Prices on the Continent are maintained, and sales some way forward have made as high as 28/. London or outports for quite ordinary brands. There has been some considerable underselling on the part of some of the English smelters whose makes are not in such good repute as formerly, but there is but little stuff offering at the moment, at the same time the demand is more quiet than usual at this season.—LEAD: The market is quiet, the low exchange ruling in China has stopped the demand thither, and the spring orders for the North of Europe are not yet offering. Consumers, however, both here and on the Continent, are without stocks, and a very slight further reduction a good trade could be done.

Messrs. Vivian, Younger, and Bond—COPPER: The market has been dull and drooping. Chili bars have given way about 10s., with sales down to 79/10s. for good ordinary brands, and specials at 80/1, closing flat, with sellers at quotations. Fine foreign is neglected, at 88/1 to 88/10s. for Burra and Wallarose. English is difficult of sale in all descriptions; manufactured has sold down to 92/1 for strong sheets. Furnace material offers at 16s. 6d. for Chilian regulus, with buyers at 6d. per unit less. The charters for the first half of this month were advised by cable this morning from Valparaiso as 1900 tons fine—350 tons of ores and regulus, and 1550 tons bars and ingots for England, and 600 tons for France.—TIN: After the close of our last report the market became flatter, with prices 10s. easier. This concession brought some orders, and a fair quantity was disposed of, chiefly Australian landing, at from 77s. to 77s. 6d.—5s., and even 10s., per ton more being made for several 5-ton warrants for delivery at once, in execution of consumers' orders. Straits being less freely offered, sold at 78s. to 78s. 6d., one transaction of 30 tons being reported as 79s., it is said to close a "bear" sale, for sellers remained over at 78s. 6d. for moderate quantities on the same day. A fair quantity of English unwrought metal sold at 81s. The market closes heavy and uncertain, in the face of heavy arrivals of Australian. At the Billiton sale, in Batavia, held on the 14th inst., 10,000 piculs sold at 53 guilders per picul, equal to about 81s. 6d. per cwt. laid down here.

Mr. Murrant.—TIN: The heavy arrivals of foreign in this port has produced a relaxed feeling; a further drop has occurred, and the tendency would still appear to be downwards. The report of the committee for the week comprises about 150 tons of Straits and Australian, at 77s. to 79s. for cash and shipment.—COPPER: Chili has again receded; the charters are advised as 1900 tons for the first half of February. No speculation is going on, the look-out being about as dull as could well be imagined. A small business only is announced by the committee at 79/10s. for g.o.b.

Messrs. Sanford and Bird.—COPPER has declined about 20s. per ton during the week, but closes a little better. Manufactured is easier.—TIN: There is a little business doing, and prices have declined.—QUICKSILVER is obtainable at 10/10s. per bottle.

Messrs. Fry, James, and Co.—COPPER having been in insufficient demand has become easier in prices by from 10s. to 20s. per ton. The amount of business induced by these concessions has not been important, and we consequently report uniform heaviness. The statistical position of copper is unchanged and sound, so that the present condition of the market should be but temporary.—TIN: The rally noted in our last as having occurred after the Banca sale was of short life, and prices have again receded. There has been a moderate business doing, but not sufficient for the abundant supplies. The fall in the fortnight has been 2/1 per ton.

Messrs. Brooker, Dore, and Co.—COPPER: Very depressed market. Chili bars have been sold at 2s. below their value a month since.—TIN has dropped to nearly the same extent as copper, but closes to-day a shade firmer.—TIN-PLATES: The anticipated reaction has not yet set in. Prices are, in fact, a trifle easier, and will not be improved by the Board of Trade returns, which now show a decline both in quantity and value of shipment.—LEAD: Considering the state of the metal market generally, lead has fairly maintained its value. English pigs have receded 7s. 6d. to 12s. 6d. within the last month.—SPELTER: Quiet market.—ZINC: Slightly easier.

Messrs. James and Shakespeare—COPPER: No sales reported in furnace material, and the difference between buyers' and sellers' views is too wide to permit of business. Bars at about 78s. per ton, without silver, inducing an extensive demand; and though deliveries continue fully up to the average, the absence of speculation prevents improvement in the article. The Chili charters for the first half of the month were advised yesterday morning—they consisted of 950 tons of bars and ingots; 350 pure in ores and regulus for England, and 600 tons bars for France. The price at Valparaiso, on the 16th inst., shows a loss as compared with values ruling here. Australian sorts are a trifle easier, but the enquiry is slack, and the sales scarcely worth reporting. English kinds partake of the general depression; makers show a disposition to give way in price, and their quotations are somewhat lower than last week.—TIN: English is rather dull, but there is no positive change in smelters' rates. Foreign rails a little lower than when we last wrote; but in the interim Straits has been sold as high as 79s. cash, and Australian at 78s., same terms.—LEAD: Values are weaker, owing to sales at Newcastle of large parcels of Spanish pig, rich in silver, at rather low figures.—QUICKSILVER is down another 10s. per bottle.

A large amount of business has been again transacted in the MINING SHARE MARKET, and a good demand still exists for lead mines, and low-priced shares. Tin mines, though there is an impression abroad that tin will shortly improve, are still neglected. The mines chiefly dealt in have been East Van, Van, Rookhope, North Laxey, West Chiverton, West Craven Moor, Great Laxey, Parys Mountain, Ladywell, Pennerley, Roman Gravels, Pateley Bridge, Tankerville, West Tankerville, Van Consols, Wheel Agar, Wheel Crebor, South Condurrow, and a few others.

East Van shares have been in further demand, and have advanced to 21 1/2, 22 1/2; the lode will soon be reached at another cross-cut, B, and great expectations are formed from it; the end is looking very promising. Van, 40 to 41; Roman Gravels, 14 1/2 to 15; no change in the mine at present. Ladywell, 24 to 25; the lead ore sold yesterday (25 tons) realised 37/10s. 12s. 6d.

Great Laxey shares have advanced 2/1 per share, and leave off 18 to 20. North Laxey shares have been largely dealt in at various

prices, and leave off 1 1/2 to 1 3/4; a report from the manager—Captain Rowe—has been circulated among the shareholders this week, in which he states—"The sinking having thus entered upon a large lode, with more ore in it than found in the levels above, and keeping in view what has already been stated of the dip towards the shaft of a great length of ore ground, to me it seems all but certain that we shall have henceforth a valuable and lasting mine in depth." He adds—"I have always maintained from the first that I considered North Laxey a continuation of the main or principal Great Laxey lode, and I still believe it to be so." Rookhope shares have been dealt in, and leave off 1 1/2 to 1 3/4. Pateley Bridge, 6 to 6 1/2; West Pateley, 5 1/2 to 5 3/4; Pennant, 5 to 5 1/2, and in demand; Tankerville, 12 to 12 1/2, ex div.; West Tankerville, 2 to 2 1/2.

Dolcoath, 38 to 40; at the quarterly meeting, held on Monday, the accounts showed a profit of 2126/1, and a dividend of 2s. 6d. per share was declared, carrying forward a balance of 192/1. The tin was 221 tons—realised 13,943/1. The average price of this tin was 4/1 per ton less than the previous quarter's sale, which makes the credit 1000/1 less. The engine-shaft, below the 326, is worth 80/1 per fathom for 12 ft. long; the 326 east, 60/1 per fathom; 326 west, 60/1 per fathom. Carn Brea, 36 to 38. Tincroft, 18 to 20. South Condurrow, 1 1/2 to 5; at the meeting the accounts showed a profit of 1135/1, a balance in hand of 2488/1, and a dividend of 2s. 6d. per share was declared, leaving 1723/1. The report of the mine was considered very favourable. Botallack, 37 1/2 to 40; at the meeting there was a loss on the quarter of 582/1, and a debit balance of 1195/1. Under the impression that tin will advance, the shareholders here—numbering, we believe, a good many smelters among them—have been stocking their tin, and have not sold any during the last quarter. Wheel Basset, 24 to 26; the accounts here show a balance against the mine of 7031/1. The loss on the last quarter was 415/1. A call of 2/1 per share was made. West Seton, 35 to 40; at the meeting the accounts showed a debt of 3890/1. No call was made. Devon Great Consols, 4 1/2 to 5; in the 60 west the lode was improved; worth 4 tons of lead ore per fathom. St. Patrick, 1 1/2 to 1 3/4. Bedford United, 1 1/2 to 1 3/4.

South Roman Gravels, 1 1/2 to 1 3/4; the new company, with Mr. E. Crawshaw, chairman of directors, at its head, has just made its appearance. It is in 18,000 shares, of 1/10s. each, and under limited liability; 12,000 of these are fully paid-up, and 6000 with 10s. paid to give 3000/1 immediate capital, and 6000/1 more if required. The old shareholders in South Roman Gravels will now stand thus: holder of 150 fully paid shares of 1/10s. each in the old will get 10 fully paid-up shares of 1/10s. each in the new company on taking 50 shares, on which he will have to pay 10s. per share. The mine, as before stated, is adjoining and immediately between Roman Gravels and Tankerville, two of the best dividend mines of the day (South Roman), and it is considered that an outlay of about 3000/1 is necessary to make the junction of these two lodes in the shaft 60 fms. deep. The mine has always been a favourite speculation, but the old company was hampered for want of capital. This is here remedied, and henceforth there will be no fear of any inefficiency of capital. New Chiverton, 6 to 6 1/2; the lode in the engine-shaft is down 13 fms. below the 35, worth 10/1 per fathom; West Chiverton, 17 to 18; Wheel Agar, 2 1/2 to 3; Wheel Crebor, 2 to 2 1/2; Wheel Grenville, 2 to 2 1/2; Old Tincroft, 4 1/2 to 4 3/4.

New Rosewarne, 3 to 4; the lode in the 67 west has improved to 12/1 per fathom. In the rise above the 58 the lode has improved to 1 ton per fathom. Relistian Consols, 3 to 4; the lode in the shaft is large and promising. Marke Valley, 3 to 3 1/2; New Consols, 1 1/2 to 1 3/4; Old Treburget, 10s. to 12s. 6d.; Parys Mountain, 1 to 1 1/4; Pennerley, 20s. to 22s. 6d.; Penrithal, 8s. to 10s.; Plynlimmon, 14s. to 16s.; Great West Van, 15s. to 17s. 6d.; Cathedral, 25s. to 30s. Trebeigh Consols, 9s. to 11s.; Van Consols, 2 to 2 1/2; West Craven Moor, 11 to 11 1/2.

Linares Zinc, 3 to 3 1/2; a company has been formed for working these mines, which appear to show great capabilities, and promise of large profits on the capital employed. Argentine, 7 to 7 1/2; Almada and Tiritio, 15s. to 17s. 6d.; Eberhardt and Aurora, 8 to 9; Flagstaff, 1 1/2 to 1 3/4; Jaravi, 10s. to 12s. 6d.; Last Chance, 1 1/2 to 1 3/4; Richmond, 6 1/2 to 6 3/4; San Pedro, 4 1/2 to 4 3/4; Sweetland Creek, 2 1/2 to 3; Condes of Chili, 6 1/2 to 7; St. John del Rey, 37s. to 38s. Santa Barbara, 1 1/2 to 1 3/4; the profit on the month of December is 428/1, 7s. 6d., the gold returned 3321 oits, worth 1407/1 12s. Cape Copper, 35 to 36.

The Market for Mine Shares on the Stock Exchange during the week has again been animated, the principal Home Lead Mines continuing in prominent request at still higher quotations.

Van, East Van, Roman Gravels, Pateley Bridge, West Pateley Bridge, Tankerville, Rookhope Valley, Assheton, West Assheton, Great Laxey, North Laxey, Port Nigel, and Plynlimmon have been the chief mines dealt in, and the general tendency yet points to improvement.

Van has advanced to 40, 41; from an inspection this week by an esteemed correspondent who has been connected with this mine from the formation of the present company, it would appear that there has been but little done in the way of stopping in the 65 fms. level that the 75 is standing whole with the exception of one small stop up only 6 ft., and that in the 90 fms. level there has been no stopping at all, thus giving three levels of comparatively untouched ore. Capt. Williams estimates it takes over five years to take away one level, so that at the present rate of extraction there are 15 years of reserve in these three levels; the cross cut now being driven at the 105 will certainly increase to 20 years. In the 75 there is a course of ore averaging 200/1 per fathom; the 90 has gone through a course of ore, worth upwards of 100/1, and the level is now nearing the point under the 75, where at 75 fms. west of the shaft this extraordinary ore deposit is now to be seen. East Van has risen to 21 1/2, 22 1/2; the lode recently cut through is valued at 180/1 per fathom, but from an inspection made this week by parties thoroughly conversant with the characteristics of the Van lode it is not so much the actual money value of the lode itself where intersected as its strength and character, showing its perfect identity with the course of ore now being worked in the Van Mine. The new shaft, west of the present discovery, is being rapidly sunk, and the ground is of the same settled character as in Van, even at the present depth of 105 fms. Grogwinion, 5 to 6; the latest advices report that everything is going forward in a most satisfactory manner, and that the lodes in the new levels continue to improve. A parcel of 70 tons of lead has been sampled this week.

Pateley Bridge shares have been firm throughout the week, closed at 6 1/2; the south cross-cut is expected to intersect the lode at 4 ft. further driving. Upon reaching this point the manager states he will be enabled to greatly increase the monthly returns. The Gillfield level the lode is worth 11/1 per fathom, and the manager says—"A finer looking lode cannot be seen in the county. There are tons of pig-lead ready for sale." West Pateley Bridge, 5 1/2 to 5 3/4; operations are progressing satisfactorily, and an early success is confidently looked for by those who have practically known the mines for many years. Wye Valley, 6 1/2 to 7 1/2; the severe frost causing some delay in surface and underground operations, but the weather having changed, operations are now going on as usual. The Wye Valley going towards the ore ground steadily improves. West Wye Valley 4 to 4 1/2; the 26 is looking very well for an early discovery of a deposit of lead. Brooke's shaft and other points going on well. Pennerley, 1 1/2 to 1 3/4; the lode in the 120 east is gradually improving. In the same level west the lode is worth 1 ton per fathom, and promising for an improvement. At Potter's Pit the sinking of the stop below the 75 is making fair progress. The lode in the west in bottom of the 75 west is worth 50/1 per fathom, and the appearance of continuance. Other parts of the mine unchanged. The sale on Thursday of 80 tons of lead realised 1200/1. In explanation of the remark made last week that the accounts for the six months just issued showed a loss, we may mention that the exact amount of the loss is 85/1 15s. 8d. Llanidloes, 3 to 3 1/2; a further improvement has taken place in the bottom level. Other points yielding lead in good quantities, as usual. Assheton, 1 1/2 to 1 3/4; West Assheton, 1 1/2 to 1 3/4; the Boundary shaft is in rapid course of sinking, and the good indications of cutting the Tan-y-Bwlch lode rich are considered to be most favourable. Port Nigel, 1 1/2 to 2; encouraging reports continue

be received. Melindar Valley, 2 to 3; the bottom level is yielding capital lead ore, and the level above is also improved. Great West Van, 15s. to 20s.; the lode in the 46 west presents a favourable appearance for a good lode of lead; the recent discovery of a lode in the eastern ground will, now the snow has disappeared, be opened on. Glyn, 2½; the Van lode, which traverses this set, now being opened on; the presence of gas in this mine is looked upon as a favourable indication, it having been met with in the Van line before cutting the rich deposits of lead found there. West Logan, 2 to 2½; the shaft is making good progress, and the stopes have grown richer.

Great Laxey shares have advanced 1½ per share, to 18, 19, and in good demand; mine improving. North Laxey shares have been in good demand all the week, at 1½ to 1¾; the lode in the shaft sinking below the 121 has opened out to 4 ft. wide, and a rich lode is expected. A highly favourable report from the manager has just been issued to the shareholders. South Cwmystwith, 2 to 2½; the late discoveries hold good, and improve.

Richmond Consolidated shares have declined to 5½, 6½; cablegram received:—Week's run, \$30,000—2½ furnaces. The make of bullion for the season is \$1,630,000, and since February \$2,203,000. The refinery this season has produced gold and silver, value \$1,054,000, respectively of the lead. No. 2 furnace, which has been running a long time, has required so much repair as to amount nearly to a rebuilding, and has thus been thrown out of work much longer than the usual period required for relining. On the completion of the No. 2 furnace, No. 3, which has been running since Nov. 30, is to be re-lined. The returns this week are at the rate of \$13,000 per furnace, and are thus still short of the average of \$15,000 per furnace which was obtained during the year ending February, 1875. It is understood that Prof. Price was at Eureka on Jan. 17, but it has not transpired whether he had made any fresh estimate of the existing reserves, or ascertained the cause of the apparent errors in his former estimate. No report from the manager has arrived this week; the cause of delay is not known, but the very heavy storms reported may have interrupted postal communication. We observe that the board have sent out notices to shareholders of the intention to issue 50,000, in debentures of 1000 each, bearing interest at the rate of 10 per cent. per annum. This step is in accordance with the views expressed by the shareholders at the last meeting. The object of the fund about to be raised is, to make the company practically independent of any bullion agent or banker, by rendering it unnecessary to obtain advances other than on bullion forwarded for sale. The sum now to be raised is about a seventh of the present market price of the property, and is to be applied in reduction of existing advances on bullion and ore, or revenue assets in stock at the works.

Flagstaff shares have risen to 1½ to 1¾; it seems the miners have broken into the South Star and Titus claim; this is important, as establishing an unbroken connection between the Emma and the Flagstaff, whose discoveries are several thousand feet apart. It is possible now to follow the great ore-producing limestone belt from the one mine to the other without leaving a mineral channel, and thus is set at rest the vexed question so often warmly discussed in these columns. The tramway running from the main incline to the ore-house at the base of the hill is now entirely covered, and the mine throughout the winter is to be worked to its full capacity. Emma, 2½ to 2¾; further confirmatory information has been received that the Bay City Tunnel, under Emma Hill, has struck the Emma vein, and found some \$2000 ore. Exchequer, 1½ to 1¾; the manager has cabled that ruby silver has been struck 4 ft. wide in the 300 ft. level. The letter of Jan. 24 stated that he had run the drift 25 ft. in the 300, and had struck 2½ ft. of ruby silver, averaging in gold and silver over \$300 per ton. Three weeks further working in the drift would bring the level 61 ft. in ore, and it is expected the vein has widened out and become richer. I. X. L., ¾ to 1¾; it is understood that active operations will shortly be commenced, and surprise is expressed that the news from the Exchequer Mine has not caused greater activity in the shares. Those well acquainted with the property believe it to be richer than the Exchequer.

Replying to various communications as to the average yield of the galena ores of Utah and the cost of smelting, it may be mentioned that the last three months' run at the principal smelting establishments was upon ore of about 30 per cent. of lead and 40 ozs. of silver per ton, carrying enough iron for fluxing purposes, and a small quantity of gold; the value of the bullion produced in the three months was \$109,961, and the cash paid for ore (1572 tons) \$70,452; the fuel charges were \$15,344, and labour and incidental expenses \$16,963, amounting together to \$102,761; this left a profit on the 71 days' run of \$7200 (or \$4.58 per ton).

In Foreign Quartz Mines the chief feature has been rather heavy fluctuations in St. John del Rey stock, closing 375 to 385; the produce for January was 52,500 ozs.; yield, 87 ozs. per ton. Argentina, 7½ to 7¾; a cablegram has been received from the Commissioner, announcing his return from Chili; he states the works are progressing satisfactorily. Frontino and Bolivia, 2 to 2½; Chontales, 2 to 2½; Javali, 2 to 2½. Sierra Buttes, 1½ to 1¾; the receipts during January were \$33,938, and expenses \$22,279; the Plumas Eureka receipts were \$34,707, and expenses \$17,778; 56 tons of sulphurates were saved and amalgamated, the produce of which has not been included in the receipts, the bullion not having been received at the date of the telegram; the agents state they expect an additional \$4000 from this source. London and California, ¾ to ¾; the clean-up for January at the Original Amador is \$14,000; details as to expenses not yet received.

The market for Hydraulic Gold Mine shares on the Stock Exchange has been moderately active during the week, and prices exhibit but little alteration. Very heavy snow is reported from all parts, so that washing will be continuous for some months to come. Blue Tent, 4 to 4½; the news from Prof. Price continues satisfactory, and particulars of the clean-up to the end of January are expected in due course. The ditch is bringing down a steady supply of water. Shares have been enquired for, and close steady. Oregon (prof.), 4 to 4½; the information contained in the letter published last week has been further confirmed by a telegram received this week, in which it is announced that the Quartz Ditch and extension was finished, except the fluming; that the damage to the main ditch during the late storm was nearly put right. Thirty boxes had been fixed at the Thos claim, which was fitted complete, and washing in successful progress, the preliminary cleans-up having proved highly satisfactory. The pipe for the Reed claim was being fitted, and washing could commence there in about a month. Cedar Creek, ¾ to 1¾; the Yankee tunnel is in full progress, and is now past the Badger shaft. Driving will be continuously carried on. The claims mentioned last are still washing. Shares quiet. Sweetland Creek, 2½ to 2¾; no further news has been received from the superintendent. The shares are a shade weaker, but very few are in the market. Birdseye Creek, 2½ to 2¾; the superintendent's weekly report appears in another column. It would seem that the washing was somewhat hindered during last run by the heavy snowstorms and the severe cold. Shares are steady at quotations.

Cathedral, 25s. to 30s.; the lode in the engine-shaft continues to improve, as depth is being attained everything appears in favour of a rich course of copper ore.

Subjoined are the closing quotations:—Ashleton, 1½ to 1¾; Carn Brea, 37 to 39; Devon Great Consols, 4¼ to 4½; Dolcoath, 37½ to 40; East Caradon, 33½ to 35; East Van, 21¼ to 23; Great Laxey, 18 to 19½; Great Wheel Vor, 13½ to 15; Hington Down, 7½ to 15; Marke Valley, 2½ to 3½; Pateley Bridge, 6 to 6½; Parys Mountain, 19s. to 20s.; Pennerley, 10 to 12; Port Nigel, 14½ to 15; Penrith, 10s. to 11s.; Rookhope Valley, 13½ to 15; Roman Gravel, 14½ to 14¾, ex div.; Tankerville, 12 to 12½; Tincroft, 15 to 20; Van, 30½ to 40; West Caradon, 2½ to 3½; West Ashleton, 13½ to 15; West Basset, 5 to 6; West Chiverton, 13½ to 15; West Pateley Bridge, 5½ to 6½; West Tankerville, 2 to 2½; Wheel Grenville, 13½ to 15; Almada and Tinto, ¾ to ¾; Argente, 7 to 7½; Birdseye Creek, 2½ to 2¾; Blue Tent, 4 to 4½; Cape Copper, 7½ to 8½; Cedar Creek, ¾ to 1¾; Chontales, 2 to 2½; Colorado Territorial, 13½ to 15; Condes of Chili, 6½ to 7; Don Pedro, 3-16ths to 5-16ths; Eberhardt and Aurora, 9½ to 11; Emma, 2½ to 2¾; Exchequer (Gold), 1½ to 1¾; Flagstaff, 13½ to 15; Frontino and Bolivia, 2 to 2½; I. X. L., ¾ to 1¾; Javali, 2 to 2½; Last John del Rey, 375 to 385; Richmond Consolidated, 5½ to 6½; Sweetland Creek, 2½ to 2¾; Tecoma, 1½ to 1¾; United Mexican, 3 to 3½; Oregon Prof., 4 to 4½; New Zealand Kapanga, ¾ to ¾; Sierra Buttes, 1½ to 1¾.

At the Truro Ticketing, on Thursday, 2279 tons of copper ore were sold, realising 10,821½, 10s. Od. The particulars of the sale were—

Average standard, 114½, 5s.; average produce, 6½; average price per ton, 4½, 15s.; quantity of fine copper, 149 tons 11 cwt. The following are the particulars:—

Date	Tons	Standard	Produce	Per ton	Per unit	Ore-copper
Jan. 20	3543	1113 7 0	63	43 6	14s. 7d.	472 16 0
Feb. 3	1433	111 14 0	7½	5 3 6	14 6½	72 13 0
17	2279	114 5 0	6½	4 15 0	14 6½	72 6 0

Compared with the last sale, the decline has been in the standard 1½, and in the price per ton of ore about 1s. 4d.

The LINARES ZINC MINING COMPANY, with a capital of 30,000, in shares of 3½ each, half to be now issued to purchase and work some calamine mines near Linares, in Spain, about 330 acres in extent. Mr. de Garay, who is described as an engineer of experience, recommended by the manager of the Tharsis Company, reports "that the deposits and outcrops appear most notable of great hopes, worthy of having in them great and important works of exploration, whose cost it is difficult to foresee at present, but he thinks about 6000, used in works of reconnaissance must easily be remunerative." The purchase price is not stated in the prospectus. The lead ore assays 50 to 60 per cent., the zinc ore from 10 to 40 per cent. Mr. de Garay lost the sample from the principal working in the Suerte Mine, but says the mine is one of the best. The prospectus will be found in another column.

WEST PATELEY BRIDGE.—The report upon these mines, to work which a company has recently been formed with a capital of 20,000, in shares of 5½ each, is a very favourable one. Capt. D. and C. Williams, who have inspected the property, state that at the joint adit level several of the productive lodes from Pateley Bridge pass into the property, all of which have proved enormously rich in those mines to a depth of 20 fms. below the joint level, and are being worked very extensively in the latter mines, showing courses of ore from 15 to 18 in. thick of pure metal, worth at least 50s. per fathom; indeed, the ore is found in almost a pure state, and requires little or no dressing, and as the West Pateley Bridge Mines are in the same limestone formation, and contain the same lodes as the Pateley Bridge Mines, they may reasonably expect the same results. In fact the surface workings on the Rake and Craven Cross veins prove, without a doubt, that they possess a most valuable property, and only require a small outlay to bring it into a permanent and profitable state. The captains remark that certain work should be at once proceeded with, and in conclusion remark that the shaft now in course of sinking upon Golden Fleese lode is down between 5 and 6 fms. The lode in the bottom is 2 ft. wide, composed of limspar, gossan, and lead ore of fine quality, and the appearance of the vein is everything that can be desired at the present depth. They consider that if these trials are carried out you will have about 50 fms. of dry backs upon the various lodes, and no doubt you will have large returns at a comparatively small outlay. It is anticipated that the mine will become a worthy companion to the adjoining Pateley Bridge property, whilst the fact of the management being in the same office as the Van Company is a sufficient guarantee for the manner in which the business will be carried on.

WEST TANKERVILLE.—The 50 south has improved to 45½ per fathom, and a new stope is set in the stope below the 50, worth 30s. The other stopes are still yielding well.

SUNNYSIDE MINES (Durham).—Mr. George Henwood, the celebrated mining engineer, who has returned during the week from journeys of inspection in Italy, Greece, &c., has been retained to visit the above mines and give a special report. We hope to publish it in the Journal at an early date.

MARK VALLEY.—It will be seen by the setting report that the prospects of this mine are rapidly improving, and the new discovery at the 30 east is still worth 8 tons per fathom. The winze in the bottom of the 20 is worth 11 tons. The 136 west is much improved. The stopes in the bottom of the 100 are still worth 8 tons per fm. At all points the mine seems prosperous. The sale of ore on Thursday, over 401 tons, will, it is expected, leave a profit on the month of at least 6000.

ISLE OF MAN MINING COMPANY.—The directors paid a dividend of 10s. per share on Nov. 22, and at their bi-monthly meeting, on Friday last, they declared another of a similar amount. The mines are looking remarkably well, especially Old Foxdale, in which the three lower levels on the north vein have been found for some time past highly productive of lead ore, assaying upwards of 100 ozs. of silver to the ton.

SANTA BARBARA (Gold).—Advices just received from Neva brings the mine accounts down to the end of the year 1875. The profit up to that time was 3222½ 6s. 10d., or sufficient to pay a dividend of about 30 per cent. per annum on the paid-up capital. The shaft has been sunk 1 fathom, and the lode retains its favourable appearance; this is an important point, as depth is attained we may expect the lode to improve in size and richness, like the St. John del Rey lode, as the lodes in both these mines are similar. The mine is opening out well, and will give good returns of gold during the next half-year. We shall soon see the Santa Barbara Gold Company in the Dividend List.

BRITISH LEAD MINES.—The City Article of the Times of the 17th inst. contained the following notice:—

"Mr. J. H. Murchison has published a pamphlet on 'British Lead Mines,' which contains a good deal of information that may prove useful at present. Since the beginning of this year a good deal of speculation has sprung up in the mining share market, and chiefly through the excitement caused by a reported valuable discovery in East Van Lead Mine, it is to lead mines that people have mostly turned. East Van Mine shares were to be bought at about 1½ a year ago, and early in January last could be had for 3½ or so. They are now 21½, although the supposed riches of the property are as yet quite unrealised, and a rise so great and sudden has acted like a powerful stimulant on all kindred properties, almost whether they justify hopes or not. Mr. Murchison's theory is briefly that on the average British lead mines have less of the lottery element in them than any others, and the figures he gives seem to support that view; at all events, those interested in this industry will find his facts and observations worth reading."

THE WEST PATELEY BRIDGE LEAD MINES (LIMITED).

Capital £20,000, in 4000 Shares of £5 each, 1003 of which are held in reserve.

DIRECTORS.
GEORGE BRIDGER, Esq., 33, East Park Terrace, Southampton.
Capt. E. C. S. HELY, 47, Eardley Crescent, South Kensington.
ABNER TORKINGTON, Esq., 9, New Bridge-street, Blackfriars.

BANKERS.
The CONSOLIDATED BANK (LIMITED), Threadneedle-street, E.C.
SECRETARY—W. J. LIVINGTON, Esq.
OFFICES,—14A, AUSTINFRIARS, LONDON, E.C.

The following is the joint report of Capt. DAVID WILLIAMS, Manager of the Merryfield Mine, and Capt. CHARLES WILLIAMS, of the Pateley Bridge Lead Mines and Smelting Company:—

WEST PATELEY BRIDGE LEAD MINES.

Pateley Bridge, Yorkshire, 10th February, 1876.—We have jointly visited these mines to day, and have thoroughly inspected both the underground and surface workings, beginning in the joint adit level, where several of the productive lodes are passing from the Pateley Bridge Mines into this property, viz.:—Jarnot, Sun, and ditto. The Craven Cross lode, Rake, Lumb, Clearer, and Pringap, all of which have proved enormously rich in the Pateley Bridge Mines to a depth of 20 fms. below the joint level, and are now being worked very extensively in the latter mines, showing courses of ore from 15 in. to 18 in. thick of pure metal, worth at least 50s. per fathom; indeed the ore is found in almost a pure state, and requires little or no dressing, and, as your mines are in the same limestone formation and contain the same lodes as the Pateley Bridge Mines, you may reasonably expect the same results. In fact, the surface workings on the Rake and Craven Cross veins prove without a doubt that you possess a most valuable property, and only require a small outlay to bring it into a permanent and profitable state.

The great advantage is that the joint adit level has already been driven parallel with the boundary of your ground for a considerable distance, at a depth of 50 fms. below surface, and from which point all the lodes can be intersected by cross cuttings. We advise the following work to be at once proceeded with:—

1.—To drive the Craven Cross lode, by six men, in the eastern part of the mine (at a point marked D on the plan), which in itself is to be a productive one; it forms a series of interconnections and junctions with other rich lodes, thereby being a most important work, and as soon as the upper workings are drained regular returns of lead ore can be made at once.

2.—To drive a cross cut in a north-easterly direction, at a point about 200 fms. west of the Craven Cross, by six men; this is a most important point, inasmuch as it will cut eight known lodes, all of which have proved very productive near the surface.

3.—To cross cut north, by four men, from the 42, in the eastern end of the ground, to cut several of the north lodes coming in from the East Craven Moor Mine, which were left very rich by the former workers on account of the great influx of water.

The shaft now in course of sinking upon Golden Fleese lode is down between 5 and 6 fms. The lode in the bottom is 2 ft. wide, composed of lime spar, gossan, and lead ore of fine quality, and the appearance of the vein is everything that can be desired at the present depth.

In conclusion, we beg to remark that if these trials are carried out you will have about 50 fms. of dry backs upon the various lodes, and, no doubt, you will have large returns at a comparatively small outlay.

DAVID WILLIAMS, C. WILLIAMS.

FOR SALE, a splendid 40-ft. WATER WHEEL, 4 ft. breast, with double-gear DRAWING MACHINE, balance bob and connection, all complete.

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DEL NORTE, RIO GRANDE COUNTY, COLO.

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LEAD ORES.

Date	Mine	Tons	Price per ton	Purchasers
Feb. 4	Tan-yr-Alit	10	£14 12 6	Weston, Son, and Co.
11	Minera	43	15 4 0	Nevill, Druce, and Co.
—	ditto	65	15 2 6	Walker, Parker, and Co.
—	ditto	42	15 6 6	Adam Eytan.
—	ditto	24	15 2 0	Nevill, Druce, and Co.
—	ditto	9	15 1 0	ditto
16	Nantiago	25	15 1 0	Burry Port Company.
17	Old Treburget	30	27 15 6	Trefry's Estate.
—	Ladywell	25	14 15 6	Burry Port Company.
—	Pennerley	80	15 0 0	ditto
—	Tankerville	60	15 8 6	ditto
—	ditto	60	15 8 0	Sheldon, Bush and Co.
—	ditto	25	15 6 6	Burry Port Company.
—	ditto	25	15 6 6	George Burr.

BLENDE.

Date	Mine	Tons	Price per ton	Purchasers
Feb. 11	Minera	23	£5 10 6	Villiers Company.
—	ditto	14	5 7 6	Kenrick and Son.
—	ditto	23	5 1 6	Richardson and Co.
—	ditto	25	5 6 0	Dillwyn and Co.
—	ditto	20	4 12 6	Konrick and Son.

COPPER ORES.

Sampled Feb. 2, and sold at the Royal Hotel, Truro, Feb. 17.

Mines	Tons	Price	Mines	Tons	Price
South Caradon	93	£6 18 0	Glasgow Caradon	30	£3 12 6
ditto	36	14 0 0	West Maria & Fortescue	91	3 7 6
ditto	63	5 2 6	ditto	33	3 13 0
ditto	63	5 0 6	ditto	33	6 13 0
ditto	55	5 2 6	Wheal Russell	70	3 1 6
ditto	53	5 13 6	ditto	51	2 17 0
ditto	60	6 8 0	East Caradon	90	4 18 0
Marke Valley	105	3 16 6	ditto	30	11 11 0
ditto	109	4 3 0	Gawton	78	3 2 6
ditto	54	4 0 6	ditto	29	3 12 6
ditto	46	4 1 0	Bedford United	60	2 18 6
ditto	41	4 6 0	ditto	29	3 3 0
ditto	25	2 4 0	ditto	25	7 11 0
Hington Down	112	2 6 6	Phoenix	105	6 12 6
ditto	105	2 1 6	Wheal Emma	45	4 2 0
ditto	42	4 15 6	ditto	13	2 8 6
Glasgow Caradon	72	6 7 0	Ambrose Lake	30	4 10 0
ditto	55	5 9 6	Michell's Regulus	23	11 10 6
ditto	56	5 4 6	Michell's Ore	5	4 3 6
ditto	54	0 6 6	Bottle Hill	4	4 10 0

TOTAL PRODUCE.

South Caradon	450	£2154 4 0	Bedford United	114	£455 12 0
Marke Valley	491	1872 6 6	Phoenix	105	645 12 6
Hington Down	280	650 18 0	Wheal Emma	58	216 0 6
Glasgow Caradon	250	1187 3 0	Ambrose Lake	30	135 0 6
West Maria, &c.	230	884 13 6	Trefry's Regulus	23	265 1 6
Wheal Russell	121	360 12 0	Michell's Ore	5	20 17 6
East Caradon	139	787 10 0	Bottle Hill	4	18 0 0
Gawton	118	353 5 0			

Average standard £114 5 0 | Average produce 6½
Average price per ton £4 15 0
Quantity of ore 2279 | Quantity of fine copper 149 tons 11 cwt.

Amount of money £10,821 10s. 0d. | Average produce 7½
Standard of corresponding sale last month, £113 7 0—Produce, 6½.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be read on receipt; it then forms an accumulating useful work of reference.

THE SHREWSBURY MINING COMPANY.—Will any shareholder be good enough to state what has become of this company? If in existence, why is there no report ever published in the Journal, that the unfortunate individuals who raised the required capital may be informed of?—A SHAREHOLDER.

MINING TERMS.—"A Novice" (Widmermere).—The "Glossary of Mining Terms," published at the Mining Journal office, will give the definitions asked for. It will be forwarded on receipt of 2s. 1d.

QUOTATIONS.—"J." (Southport).—The quotations are those furnished by dealers interested in the mines, and represent Friday afternoon prices. No record is kept of fluctuations in the interval, except in case of extraordinary excitement in the market concerning some particular mine.

GREAT WEST CHIVERTON-TUOLUMNE.—Can any reader inform a shareholder what has become of the Great West Chiverton Mine? Who were the promoters and directors? A Mr. Broadbent, jun., was secretary, and the offices in Dowgate-hill, Cannon-street; but, being in London recently, I could find no such person. I have never, from receiving the certificate, heard anything of the mine. Can I, as a subscriber, recover? If so, it is to be hoped other shareholders will join in seeking to recover their money, as no meeting, &c., has to my knowledge been convened.—Tuolumne Gold Mine was brought out about the same time, and strongly recommended by "Circulars." Can anyone tell me the amount spent upon the mine, its intrinsic value, and what amount of gold was discovered? When mines of this character are brought before the public it is only right that full investigation into their affairs should be allowed, and that nothing should be withheld, which would destroy that confidence in mining which must result if money is invested without some power to bring the defaulting promoters to justice.—SHAREHOLDER.

GOLD IN WALES.—The continuation of Mr. T. A. Seadwin's papers on this subject will appear in next week's Journal.

Received.—"E. P." (California).—"Engager" (Philadelphia).—"J. W. S."—"A. T."—"G. H." (Brisbane). Shall be attended to—"W. S."—"Shareholder" (Roman Gravel). Had better write to the office—"Observer" (Mining Education). Next week—"Y. Z."—"B. A." The length of the Suez Canal is 90 miles—"J. G."—"Mendip"—"W. E. H."—"R. S." (Callington).—"B." (Newport); Yes—"C. M." (Plymouth).—"W. F. F." (Tavistock).—"An Old Subscriber" (Wolverhampton). See City Article—"T. C."—"J. B. D."

IMPORTANT NOTICE.—REDUCTION OF POSTAGE ON THE "MINING JOURNAL."—In consequence of the new POSTAL CONVENTION, which came into operation on July 1, the postage of the Mining Journal to many countries will be reduced to one fourth. Henceforth the subscription will be 1s. 10s. 4d. per annum (39 frs.), postage included, for the following countries. The amount will, if desired, be collected at the subscriber's residence at the end of each year. The subscription continues until countermanded.—Austria, France, Belgium, Denmark (including Iceland and the Faroe Islands), Egypt, Germany, Gibraltar, Greece, Heligoland, Italy, Luxembourg, Netherlands, Norway, Portugal (including Madeira and the Azores), Roumania, Russia, Serbia, Sweden, Switzerland, United States, Malta, Turkey, Morocco, Tunis, and the Canary Islands. Spain 1s. 19s. (50 frs.)

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, FEBRUARY 19, 1876.

THE CLEVELAND IRON MINES.

The story of the "commercial discovery" and of the development of the Cleveland iron mining trade is tolerably well known, but there is only a faint general conception of the present position and tendencies of the trade, and it may be well to point out these in part. The increased output of stone from a few tons a week gathered on the coast, little more than twenty years ago, to its present magnitude of 110,000 tons is almost "as familiar in our mouths as household words," but the sources of the output are by no means distinctly known. We may indicate these in part for three of the later periods for which figures are available. The mines may be taken as 50 in number, but by far the largest amount of ore is sent from 26 of them. In 1865 the returns of mines working gave the names of 19 only—Belmont, Birds and Birtley, Brctton, Eston, Grosmont, Hays, Hollins, Hutton Low Cross, Lofthouse, Normanby, Port Mulgrave, Rosedale, Skelton, Spa, Spa Wood, South Belmont, Upleatham, Hob Hill, and Woodfield. In that year Belmont produced out of the total of 2,726,359 tons 175,894 tons, but in 1873 it sent out only 134,965 tons, and in 1874 there was a further decrease to 91,842 tons. Brctton, in 1865, had an output of 113,160 tons, increased to 375,331, but last year there was a considerable reduction in quantity—to 337,733 tons. Eston, in 1865, had an output of 655,980 tons, slightly increased by 1873 to 795,228 tons, but falling in 1874 to 563,888 tons. Taking Skelton next, in the first-named year the output was 108,753 tons, in the second 165,280, and in the third 157,755. Spa had in the first an output of 90,776 tons, in the second 109,669, and in the third 96,185. Upleatham had, in 1865, an output of 717,998 tons, in 1873 550,930, and in 1874 503,812. Thus in each of these cases there was for 1874 a lessened output on the previous year; and in several instances the ore sent out was less than the quantity nine years previously. There was one exception to this rule, that of the Lofthouse, which has for some years continued to increase its output; but at Normanby Mines the decrease was exceedingly small, but the other mines named in the list of those working in 1865 did not figure in the lists for the later years. In one of two cases this was due to local reasons, in others it was due to the procuration of other and more accessible mines; and in some cases the cessation is due to the working out of the mine. This was the case at Hob Hill, which were opened in 1874, reached their meridian about 1871 with a production of about 430,000 tons annually, fell in 1873 to 160,000 tons, and were closed, as being exhausted, in 1874.

Again, comparing some of the chief mines working in 1873 and the succeeding year, it will be found that many of these have a declension to report in the latter year. The Cliffe Mines sent out 85,545 tons in 1873, and 74,859 in the following year; Park, in the first-named year had an output of 176,238 tons, and in the last of 151,572; Liverton had in the first an output of 278,108 tons, and in the second of 243,035; Stangbow in the first had 93,014 tons, and in the second 87,182, and there are other reductions which are at least unexplainable by the reasons often given for these descensions in production. It is true that the gross amount produced in Cleveland was largely increased, and it is probable that in 1875 even the amount of output will have been kept up, but this has been done by the opening out of new mines, and by the development of mines opened within the last few years. The mines at Boosebeck, Carlisle, and Kirkcaldham, for instance, had outputs in 1874 which many times multiplied those of 1873, and there have been later developments.

There is another feature in the working of these mines which is notable. In 1865 only four or five of the mines were owned by blast-furnace proprietors, but the proportion has been of late largely increased. In 1875 there were more than double that number, and in 1874 there were 18 thus owned. And not only was the number increased but also the amount. The mines in Cleveland whose owners are comprised in the Mineowners' Association were 26 in number in the year named, and of these eight only were owned by owners who did not own blast-furnaces. At these eight mines 1,916,467 tons of ore were raised in the year last indicated, and it may be said that out of these five mines are the property of one firm, and the output of these five was nearly two-thirds of the whole. At the 18 mines worked by blast-furnace owners 2,503,202 tons of iron ore were raised in 1874, which is 57 per cent. of the whole raised by the associated owners, and nearly one-half of the amount raised in Cleveland. Indeed, looking to other mines, such as the Grosmont and Rosedale, it may fairly be stated that three-fourths of the iron raised in Cleveland is now directly raised by the owners of the furnaces who manufacture it into crude iron. There are, then, indications of a change transpiring in Cleveland mines—of their coming more into the hands of mineowners, and if not of exhaustion of some of the older mines, at least of a lessened dependence on these, and of a consequential restriction of their output, which has been assisted latterly, and will be more assisted in the future, by the provision of better railway facilities, enabling the tapping of fountains previously inaccessible. One of the conse-

quences of this is that when the demand for ore increases there will be a larger range of sources of supply, whilst at the same time the proprietors of blast-furnaces are yearly becoming more independent of the ore markets for their supply. The producing capacity is also increasing, and though there are apparent symptoms of decay in the finished iron trade of the North, there are on the other hand indications that as a producer of pig-iron the North is likely to take a yet higher rank in the future.

OUR RAILWAY IRON ABROAD.

We are now in possession of data illustrating the shipments of British railway iron to British colonies and foreign countries during January this year, and the result must be pronounced in the last degree discouraging, the exports of the month having been only 23,580 tons, as compared with 36,171 tons in January, 1875, and 46,598 tons in January, 1874. The aspect of affairs was bad enough twelve months since, but now it has become a good deal worse. This is the conclusion to which, whether we like it or not, we are inevitably reduced. Italy, Sweden, and Brazil certainly took our railway iron a little more freely last month than in January, 1875, but a declension was observable in well nigh every other direction. In the case of the United States the demand for railway material may almost be said to have collapsed altogether, amounting, as it did, to a wretched 23 tons in January, 1876, against 2376 tons in January, 1875, and 7444 tons in January, 1874. The Canadian demand for our railway iron kept up well in January; but we only sent 2411 tons of our iron to British India in January, against 5113 tons in January, 1875, while Australia took 3649 tons in January, against 8796 tons in January, 1875. Altogether, it must be said that our railway iron exports are in a very bad way.

At the same time there are indications of some improvement in affairs in the future. The great cause of the loss of our foreign iron trade has been the disorganised condition of the labour market, and the equally remarkable state of the markets for raw materials. On all sides the British ironmaster has had to contend during the last three years with, it may be hoped, unprecedented difficulties—dissatisfied bodies of workmen utterly heedless of the importance of some little profit accruing to their employers; increasing external competition both in Europe and across the Atlantic; a constantly extending employment of steel rails; and a collapse of credit in some of the weaker foreign States. It is against such terrible obstacles that our ironmasters have had to plod on and on as best they might, but we fancy there are now some little indications of a change for the better. Mr. HALLIDAY has at length been taught by the sternest possible experience that capital must receive a small modicum of remuneration, or otherwise it will remain locked up; and we believe he has this week been consenting partly to some reduction of wages in the Welsh coal trade, from which it may be inferred that he is powerless or indisposed to resist any longer a return to reasonable and possible rates of wages. If this is the case our ironmasters may obtain a very important measure of relief in one very material branch of their expenditure. With regard to foreign competition it is of course greatly dependent upon the means which British ironmasters have at their disposal for grappling with it. Great Britain obtained her past—we are afraid that we can hardly say, in the matter of iron, her present—industrial supremacy in consequence of her producing manufactured goods of various kinds upon remarkably cheap terms, and the nearer we can return to our old cheapness the harder will foreign competitors find it to cope with us upon the markets of the world. Cheap coal and cheap labour are essential elements in the success of British manufacturing industry; are we taking too sanguine a view of matters when we express our conviction that cheap coal and cheap labour appear to be once more likely to be at the command and disposal of British industrialists? With regard to steel rails, if our ironmasters cannot deal with this drawback to a restoration of the once active demand for British iron rails, it is tolerably clear that they must conform to the circumstances and conditions of the times, and adapt their works for the production of steel in the place of iron. The collapse of credit in some parts of the world must work its own cure. The financial difficulties which now afflict certain foreign countries will lead undoubtedly to a great displacement of capital. But if more of the accumulated wealth of Great Britain flows in consequence into British colonies our ironmasters will have no reason to complain.

BRITISH ENTERPRISE IN NAMAQUALAND (CAPE OF GOOD HOPE).

The year opened brilliantly at the Cape Copper Mining Company's works at Ookiep, New Year's Day having been chosen for formally opening the railway which the company have constructed for the conveyance of their minerals and materials from the mines to the shipping port, 93 miles distant. In order to be present at the ceremony, the visitors from Port Nolloth had to leave that place at 3:30 A.M., at which time the train was in readiness to convey them, and by noon the party reached Klipfontein, the residence of the railway engineer, where Mr. and Mrs. Thwaites had provided an excellent luncheon for the whole party, which had now been increased by the contingents from Abbeville, Ananous, and other places on the route. After luncheon the train proceeded to Steinkopf, where a further addition to the number was made, and at Steiger Kraal, the late terminus, the party was met by a number of the inhabitants of Springbok and Ookiep. After an interchange of civilities the journey was resumed and Ookiep was reached shortly after 4 o'clock in the afternoon, and notwithstanding the intense heat the travellers declared that the day had been a very enjoyable one. In the evening 100 sat down to dinner. Mr. E. J. Carson, the superintendent, occupied the chair, and Mr. Thwaites, the engineer, supported him. The whole of the Cape Copper Company's officers were, of course, present, and the Civil Commissioner, the Resident Magistrate of Port Nolloth, Mr. R. J. Hall, late traffic manager, and many of the leading merchants of the district, had also accepted invitations, the number being made up by employees on the line.

The usual loyal toasts, as well as "His Excellency the Governor" and the "Colonial Ministry" having been drunk, Mr. E. J. Boyes, Civil Commissioner, proposed "The Directors of the Cape Copper Mining Company." He said that all must acknowledge that the company deserved to be called one of the most liberal in existence. In proof of this he need only remind them of what the company had done during the recent drought. He had no hesitation in saying that by the seasonable relief afforded, both to their distressed farmers and natives, the lives of hundreds had been preserved. As to the company's enterprise, it was no slight undertaking to venture on the construction of nearly 100 miles of railway in a country like that. The toast was ably responded to by Mr. Carson, on behalf of the directors, and, in proposing success to the undertaking the completion of which they had met to celebrate, remarked that he would ask them to bear with him while he endeavoured to demonstrate the necessity that urged the company to take this work in hand. He was speaking in the presence of many who were well acquainted with the history of copper mining in the district. The metalliferous deposits were first advantageously opened up by Messrs King and Co., and in their day it was conclusively shown that parts of the land we live in were exceptionally rich in deposits of copper ore. The unfortunate copper mining mania of 1854, which many of them, no doubt, could readily call to mind, cost the colony a large sum of money, and threw discredit upon the resources of Namaqualand. Notwithstanding this, several mines which had hitherto paid their way continued to flourish; but it soon began to be found that, in consequence of the distance from the port of shipment, and there being something like 6000 miles between the mines and mart, that if the works were to be fully developed, by the extended employment of machinery, of more men and skilled labour, then it was essential that the working capital should be increased, and that largely. After the demise of two of the partners in the firm the Cape Copper Mining Company was formed, and commenced operations. The "New Company," as it was called, soon, however, found themselves in a dilemma; for owing to the skill and rapidity with which the mines were opened out, and the distance between the point of production and that of sale, the stocks of rich ore (which, of course, meant ca-

pitally) gradually accumulated, until there were thousands of tons ready for sale lying idle at the mine. The difficulty, great as it was, was increased by the severe drought which occurred from time to time, and which at length completed the break-down of the old transport system. In face of these hindrances to the development of this valuable property, the directors in 1865 sent out Mr. Hall to survey the country, and to ascertain the best mode of meeting the difficulty. His report was soon forwarded to the board, and after mature consideration the directors resolved on the bold but masterly course of increasing the capital, and constructing a cheap line of railway from Port Nolloth. In 1868 Mr. Hall was again sent out to carry this decision into effect, and he was enabled to carry the line across the broad belt of sand between the coast of "Ananous" and the rugged mountain to Klipfontein, and from thence to Onemas, 75 miles from the port, by December, 1874. As most of them knew, Mr. Hall was succeeded in March last by the gentleman who now holds the post of railway engineer, and to him belongs the honour of completing the line. They had to thank him for the great energy he had displayed in finishing the work, and although some present had not before had the pleasure of meeting Mr. Thwaites, yet he felt assured that all would gladly unite in drinking "Success to the iron road, and the health of Mr. Thwaites."

In acknowledging the compliment, Mr. Thwaites very graciously remarked that the greater part of the credit was due to his predecessor, Mr. Hall, considering that when he came ten months since he found nearly 80 out of the 93 miles laid. However, he thought that not only the Cape Copper Mining Company but the colony was to be congratulated on the construction of such a line. For it had been shown that a line capable of conveying at least 2000 tons per month could be laid at an average cost of 1700l. per mile. It might be argued that few districts would show such a favourable condition for the construction of a cheap line as was afforded by the level country between the coast and the foot of the mountains; but there were exceptional difficulties, caused by the mountains and the very broken country between Klipfontein and Ookiep. It was not necessary at the present day to say anything as to the value of railways to a country—the colony now seemed fully alive to their importance. He would now take this, the first opportunity he had had, of publicly thanking all those who had worked under him, and to whom cordial co-operation so much of the success was due. (Cheers.)

The toasts of the "Civil Service" and the "Superintendent" having been duly honoured, Mr. Boyes gave "The Health of the late Railway Engineer, Mr. R. T. Hall," remarking that no one could go over the line but must confess that the man who could surmount the engineering difficulties between Anenous and Klipfontein and through Ratel Poort was entitled to a high rank in his profession. He trusted that he would yet be enabled to do good work in the Transvaal, in which fine country he hoped that Mr. Hall and his family would have all health and prosperity. Mr. R. J. Hall ably acknowledged the toast on behalf of his father, who he said would have been much pleased to have been present. The Rev. W. Morris could not allow the occasion to pass without asking them to drink one more health, that of one whom all respected and loved, and who had done more, perhaps, than any other man to develop the resources of this country, and who had been superintendent not only of the present company, but of the one out of which it arose—he meant that of Mr. John Wild. The Chairman said that, on behalf of Mr. Wild, he begged to return his thanks for the hearty manner in which they had drunk to his health and prosperity. He could assure them that nothing would give Mr. Wild greater pleasure than to have been present this evening, to meet so many old friends once more, to see numbers who worked under him for so many years, and to commemorate the opening of the line. He still takes a deep interest in the welfare of the district; and would, if here to-night, ask them, as he (the Chairman) now did, to drink to the prosperity of Namaqualand.

The value of the railway—the opening of which this meeting was to celebrate—to the Cape Copper Mining Company can scarcely be overestimated; and, as one of the speakers very justly remarked, both the shareholders and the colony may be congratulated on its construction. Although no less than 93 miles in length, and presenting important engineering difficulties, the line has been completed without making a call upon the shareholders, without creating debentures, and even without suspending dividends, the difference in the cost of carriage by bullock teams and by rail (even with but part of the line opened), and the release of capital by removal of the accumulated stocks of ore, having sufficed to provide the greater portion of the outlay. The work is now completed, in full working order, and out of debt; and, inasmuch as, in addition to the mine traffic, the line will, doubtless, be able to earn handsome profits from the ordinary colonial traffic between Port Nolloth and the interior of Namaqualand, the shareholders may anticipate a period of increased prosperity, of which they may well be proud, whilst the directors, who have so ably carried on the company's affairs, are fully entitled to the highest eulogium for the manner in which they have protected the shareholders' interests.

THE DIAMOND ROCK BORER.—At Rampside, in Lancashire, one of the Diamond Rock Borer employed by Messrs. Brogden and Son and under the charge of Mr. John Vivian, C.E., has made very satisfactory progress, having bored a length of 63 ft. with a single shift of men during the week ending Feb. 12, attaining a total depth of that date of 2102 ft. from the surface. Excellent cores of the strata passed through have been brought to the surface from this great depth; the facility and precision with which this is done being one of the features of this rock borer. The hole was begun with a core 5 in. in diameter, in the latter part of January, 1875, and was proceeded with satisfactorily until the last week of June, 1874, when a depth of 1451 ft. from the surface had been reached. Then, however, a thick bed of soft shale that had been passed through seems to have fallen in and jammed a considerable length of rods. The damage took exactly one year to repair, for it was not till the last week of June, 1875, that boring to a greater depth was re-commenced. Since then the boring again shows very satisfactory results, for on Feb. 12 a total depth of 2122 ft. had been reached, thus giving an average of 89 ft. per month of boring accomplished at this great depth.

CUMBERLAND PENCIL LEAD.—With reference to the notice of the Borrowdale Plumbago in last week's Mining Journal, Mr. William Salmon, F.G.S., writes that the price offered for the pick of the samples was 40s. per pound, and not 14s., as stated. The prices seem high, but it is attributed to the circumstance of the mines being so pure that pencils made from it sell at a high price. The Borrowdale plumbago is unquestionably the best produced in the country, and should, therefore, command a ready sale at fair prices amongst English pencil makers, and it is anticipated that the mines so far from being exhausted, as has been supposed, are likely to be more prolific in supply in future than they have been in the past. Prof. Warington Smyth did not inspect the specimens extracted from the mines, but Mr. R. Hunt, F.R.S., and many of the leading pencil makers and dealers in Cumberland and London, examined them, and pronounced them to be the purest plumbago. It should be mentioned that a process somewhat resembling Brocklewood's has been discovered, by which the crude mineral will be so completely cleansed from the impurities with which it is associated that the high reputation which the Borrowdale mines enjoyed years since will be permanently restored.

CARRIAGE OF EXPLOSIVES.—That the fraudulent carriage of explosives by passenger trains should be adduced as a reason why railway companies should lessen the restrictions upon the carriage of explosives appears much like arguing that because the number of criminals is large therefore crime should be permitted to go unpunished, yet such is the argument put forward by Major Mayhew, who complains that the cost of conveying a box of fireworks, worth but a few shillings, from London to Aberdeen is 9l., and that, therefore, both gunpowder and fireworks are fraudulently sent under other names. He suggests that instead of punishing the fraud, the cost of transport should be reduced to such a figure as will render such fraud unremunerative to those practising it. The carriage of explosives has always been discouraged by railway companies, and in doing this have kept the price for transport much higher than

ordinary merchandise. Mr. Cuthbert, the manager of the British Dynamite Company, maintains that, inasmuch as the company have shown by experiments that unconfined dynamite may be burned in an open fire without exploding, and that careful arrangements are required to make it explode at all, the restrictions which railway companies place upon its carriage should be removed. Of course, the railway companies are the best judges of the tariff at which they should carry any class of merchandise in order to compete with the other modes of transport, but when the question is reduced to the alternative of carrying explosives at prices to be determined by the manufacturers thereof, or of engaging a staff of detectives to watch such manufacturers' agents, the former may perhaps be chosen. Mr. Cuthbert mentions the curious calculation that dynamite has passed over 1,333,250 miles of rail and road without accident.

THE MARSDEN MEMORIAL.—The committee for erecting the memorial statue to the late Henry Rowland Marsden, the introducer of Blake's Stone-Breaker into this country, has now been formed.—Mr. E. Tiffany being president; Messrs. Nicholson, Gledhill, and Brown, vice-presidents; M. J. J. Cousins, honorary treasurer; and Messrs. Houghton and Midgley. It was remarked in the Journal of Jan. 22, that the enormous benefits the invention with which he was identified has secured for miners should suffice at least to induce Cornishmen to supply as handsome a pedestal of granite as the county can produce to assist in perpetuating his fame. As the time has now arrived for giving force to the suggestion, it may be hoped that Mr. Benedict Kitto, or some other gentleman connected with the Royal Cornwall Polytechnic Society (which may fairly be regarded as the chief representative of the Cornish mining interest) may at once take the initiative in forming a Cornish committee to assist in making the memorial as imposing as possible, and both he and the committee may rely upon all the support which the columns of the *Mining Journal* can give them.

THE SUB-WAELDEN EXPLORATION.—The boring has reached a depth of 1849 ft. Mr. Willett says—"The conviction has been irresistibly forced on my mind that the theory of the presence of a ridge of old rocks north of the English Channel and south of the Thames is no longer tenable." He gives reasons for holding this opinion, and adds—"The same reasons, with greatly increased force, on account of the additional strata to be pierced apply, in my humble opinion, to the whole remaining area of Kent and Sussex; and, so certain I am of the correctness of my deductions, that I will undertake to pay, personally, the whole cost of a boring of 2000 feet if palaeozoic rocks can be found by this process, commenced in any spot either of the parish of Ilythe or in any part of Kent or Sussex above the Wealdon horizon. I am presumptuous enough to say this in opposition to the opinion of an eminent geologist that 'somewhere near Ilythe, or 'North of North Downs,' or 'in the Thames Valley,' east of London, coal measures are to be found."

SOMETHING LIKE A BORING MACHINE.—One of the great objections raised against the Channel Tunnel scheme is the length of time it will take to execute; but if we are to believe the *Liberte* this objection has now disappeared. In fact, according to that paper, the Tunnel can be completed in less than six months! It tells us that a machine has just been invented by which 55 metres of ground may be pierced through per diem, and it calculates if both the English and French begin piercing at the same time the Tunnel can be cut out in 144 days!

THE BLOCHMANN IRON COMPANY (Limited).—The opinion of counsel (Sir H. James, Q.C., M.P., Mr. Graham Hastings, Q.C., and Mr. Bowen) has lately been taken, at the instance of certain shareholders, as to the liability of the promoters, Messrs. Chadwick and Co., to make good the losses which the shareholders have sustained, on the ground of the gross misstatements made in the prospectus and elsewhere; and meetings have since been held in Manchester and Leeds to consider what further steps should be taken. Mr. Wilson (Messrs. Newstead and Wilson, Leeds) read the opinion of counsel, and also, at the request of Mr. D. Chadwick, M.P., read some letters which he had received from that gentleman asserting that his firm had acted with integrity in forming the company, and deprecating any proceedings against them. It was decided that proceedings should be commenced against Messrs. Chadwick and Co. An influential committee was appointed to control the proceedings, and a guarantee fund is being raised to defray the expenses. It is understood that half the required amount was raised before any application was made to the general body of shareholders.

AMERICAN PATENT LAWS.—A Bill recently introduced in the United States for the amendment of the Patent Laws dispenses with models, allows appeals from Patent Office decisions to the Courts, provides that rejected applications shall be kept secret, and provides for the publication of all patents issued prior to the adoption of the system of printing current issues.

COAL AND IRON IN THE UNITED STATES.—The deliveries of anthracite coal in Pennsylvania to Jan. 22 this year amounted to 1,309,253 tons, against 1,203,049 tons in the corresponding period of 1875, showing an increase of 106,204 tons this year. The deliveries of bituminous coal in Pennsylvania to Jan. 22 this year amounted to 1,634,490 tons, against 1,341,184 tons in the corresponding period of 1875, showing an increase of 293,306 tons this year. The shipments of coal from the Cumberland (Maryland) district last year were as follows:—By the Chesapeake and Ohio Railroad, 1,240,771 tons; by the Chesapeake and Ohio Canal, 879,935 tons; and by the Pennsylvania State line, 160,708 tons; making a total of 2,281,415 tons. This total presents a reduction of 129,480 tons, as compared with the corresponding total for 1875. Some steel rails imported from England 11 years since by the Pittsburgh, Fort Wayne, and Chicago Railroad Company, and laid down on that company's system, are still in an effective condition. The Pittsburgh, Fort Wayne, and Chicago Company is at present obtaining large steel rails of American manufacture at \$70 per ton. English iron rails have been quoted of late in bond at New York at \$35 to \$36 per ton gold; American iron rails have made at the works \$45 to \$48 per ton currency. In consequence of a glut in the Pennsylvania coal markets the proprietors of the Schuylkill Collieries have agreed to stop work from Feb. 5 until March 11.

ECONOMIC TREATMENT OF ORES.—Some improvements in the economical and effectual calcination and chlorination of poor and other ores have been patented by Mr. T. J. BARNARD, of Plymouth. Instead of placing ores upon any ordinary hearth, with a flame brought to bear above or over them, the hearth is made of fire-clay tiles or iron, or other suitable substance, and a flame placed underneath, so that the bottom of the hearth or furnace is made red-hot, but little fuel is required by this plan, which can be illustrated and proved by an ordinary frying pan with ore upon a fire, as a red or white heat can be quickly obtained and retained at a very little cost and labour, naturally by heat or a flame being conducted over ores as hitherto practised the action must be upon the surface or top of them, since the bottom of all furnaces is never sufficiently hot to be of any practical utility. As before described, the ores are placed upon red-hot tiles or iron and the work commences at once. Chlorine instead of immediately escaping, now passing through the body of mineral substance, which is turned over and over at diverse periods by any of the ordinary well-known methods, so that every particle of mineralised matter at some period or other during the process rests upon red-hot tiles or iron. Coals and other fuel of the most worthless description can be used, as the absence of draught which has till now been regarded as the most essential item is quite secondary, or gas may be made and jets placed underneath the hearth in order to cause each and every pound of fuel to do full justice instead of tons upon tons of coals being used to kindle a flame which ends only in wearing out furnaces without acting effectually and profitably upon ores. Further by the invention where coals or other fuels are used instead of gas, the flue conducting the smoke from the fire will be separate and distinct from the flue or chamber through which the fumes given off from the ores pass, by which method air can be admitted or stayed *ad libitum*, sulphur, arsenic, and other volatile matters collected in a purer state, and the escaped chlorine

not having the contamination of fuel smoke, hitherto causing a commercial failure, will form an important subject of utilisation in the preparation of bleaching powder and other bi-products.

MINING COMPANY OF IRELAND.—This enterprise has now been established more than half a century, and the enormous amount of benefit which it has conferred upon Ireland is absolutely inestimable. An analysis of the company's accounts shows that, taking a rough average since the closing of the capital account, the company expends in wages over 100,000, for each 5000, of profits realised, and inasmuch as the shareholders have received 460,950, in dividends, it follows that since the shareholders commenced to receive dividends no less than 9,219,000, has been paid away as wages to their workpeople. The company, moreover, was formed in 1824, but did not enter the Dividend List until 1838, and during the fourteen years in which the concern was in a progressive state the shareholders contributed 140,000, towards expenses and losses, and paid upwards of 1,750,000, in wages to the workpeople. In the aggregate, then, the operations of the Mining Company of Ireland have provided 11,000,000, for wages, and given a large amount of employment to a vast number of families. The capital of the company is 500,000, in shares of 25, each, but only 71, has been called up, and no call has been made since 1835. The collieries, lead mines, and smelting works of the company are all realising profits, and although for the moment the Knockmahon Mines are, owing to the depressed state of the copper market, not quite covering the outlay, they are thoroughly good mines, and will doubtless contribute largely hereafter to the general profit fund. They produced during the six months ending Nov. 30 upwards of 2000 tons of ore, which sold for 10,494, 10s., and the loss was but 1732, 5s. 7d., so that a comparatively small improvement in the market would put the balance on the right side of the account. In spite of the Knockmahon drawback, however, the company's net profits for the half-year were 4193, 6s. 8d., and out of this a dividend of 5 per cent. was paid during last month, leaving a good balance to carry forward. The concern is altogether in a highly prosperous condition.

CHINA-CLAY IN THE HELSTON DISTRICT.—The extreme depression of mining in some parts of West Cornwall appears to have stimulated a looking after other sources of industry, hitherto partially, and, in some cases, wholly neglected; this is particularly obvious in the Helston district, where important and extensive beds of china-clay have lately been opened up. The most important discoveries and operations in the district are at present carried on in the parish of Germon, near Breage, in and about the Tregoning Hill, where the production and manufacture of the article has been for many years successfully carried on in a small way, chiefly by local enterprise. Ultimately, however, the attention of outsiders was drawn to the district, and within the last 12 or 18 months the first start was made by the formation of a company for working a portion of ground near the once celebrated Wheal Grey Mine. A fine bed of clay was quickly laid open; and, by great zeal and activity, it is anticipated clay will be ready for the market in a month or two. The prospect appears to be very encouraging in a pecuniary sense and otherwise. Another company, under the limited liability principle, is now being brought out to work more extensively the Tresowes China-Clay Works, which have been successfully and profitably carried on in a small scale for a long period. The situation of these works for cheap and profitable working is exceptionally good; and there can be no doubt from the great mass of potting and bleaching clay known to exist in the grant that, by proper conduction, the results will be of a perfectly satisfactory character; and the directors, from a property like this, should have no difficulty in getting a requisite amount of capital to carry out the works of extension so wisely intended. The works have been most favourably reported on by well known practical men, who estimate the average profit on per ton of clay will be from 6s. to 8s., or about equal to 20 per cent. on the capital of the company, on a return of only 3000 tons yearly. The Tregoning Hill China-Clay and Brick Company are near the former, and have for many years been worked so as to return regular dividends to proprietors. At these works very superior bricks and tiles are manufactured from the refuse of the clay; this principle should be adopted by other works, as it must considerably add to the profit and value of the properties. Various other grants for china clay have been secured in the immediate locality of those named, in which large bodies of china-clay have been found, and will probably very soon be spiritedly developed. This augurs well for the future, and is hailed with satisfaction in what a short time ago was condemned as an exhausted district; and it is earnestly wished that the operations in this district, as has been the case in other parts of the county, will richly repay for the capital invested in what may be considered industrial and commercial enterprises. Great praise is due to Mr. W. Argill, of Breage, who has intensely exerted himself in bringing about the foregoing results, and who, it is a satisfaction to learn, is officially connected with them all.

REPORT FROM CORNWALL.

Feb. 17.—One never looks in vain to the Dolcoath account to supply a text for comment, and last Monday's meeting was unusually fruitful. Here is a mine which ten years since, at the period of the last greatest depression in tin, could only give 353, in dividends, principally derived from copper, that can now with an equally low standard, although much deeper, divide over 2000, per quarter. The present price of tin as compared with that at the previous meeting has caused the mine to receive 1000, less on its sales, yet here is the 10s. dividend with the regularity of clockwork. And be it remembered that this, though the result of good management, does not arise in any way from cheapselling or neglect. It is not a mere consequence of "picking out the eyes." On the contrary, we hear that during the past quarter the man-engine has been extended 36 fms., and that by the aid of a new engine the men will be able to go up and down twice as fast as at present. Capt. Thomas was wisely oracular with regard to the future. He would not go further than to say that if trade generally revives the tin trade will revive as well. On the prospects of a general revival of trade he was wisely silent, but his acts speak more than his words. He would hardly talk of driving a new level under the valley part of the mine at such a juncture if he had not hopes that the lowest point had been reached to encourage him, and if he did not expect some revival in the standard at no very distant time. At least, that is the light in which we read his proposal. His notice of the boring-machine, though brief, cannot be deemed other than satisfactory. The 202 level is to be driven by its aid, and he anticipates that it will do the work very much faster than hand labour.

There was a fire at Dolcoath on Sunday at the large steam-stamps house, but it did not turn out anything very serious. The two engine nightmen left their work, and damped up their fires at seven o'clock. Soon after they left a man named Rodda, who lives near, saw flames issuing from the engine-house. He immediately went to the spot, and procured such assistance as was obtainable. The flames soon attracted a large number of persons from the neighbourhood. Two hoses were laid on as soon as possible, but before this was accomplished much damage was done to the house, and the roof speedily fell in. It is most fortunate that a fire-engine was on the mine, otherwise it is probable that damage to a large extent would have been done, as the shedding of the extensive run of floors is almost close to the engine-house. The agents on the mine were early on the spot, and by the energetic action of many willing hands all danger of the extension of the fire was soon at an end.

At the County Adit meeting, held recently at Truro, it was stated that the ochre collected from the sediment of the water flowing out of the adit is now made to bear a very large proportion of the expense of maintaining the adit. The attention of those primarily interested in the adit was first directed to this matter some two or three years since, when it was shown that private persons were obtaining the ochre, and making a handsome profit out of it, while the maintenance of the adit was borne by the mines into which the adit extended. Things have, however, been placed on a different footing, and the ochre is now collected by the agents of the adit.

Mr. Basset has given yet another proof of his liberality by reducing the Cook's Kitchen and Wheal Basset dues to 1-60th during pleasure. We commend this example to those lords—happily there are not many of them, nor as a rule is their interest large—who think that the present is a time to insist upon their miserable pounds of flesh, and thus do their best to kill the goose that in more prosperous times lays such stores of golden eggs. It should be borne in mind that it is not the general rule in civilised countries—as in England—for minerals to be absolutely private property, and granted due compensation made for surface damage, more consideration should be shown than is very often the case for those who speculate with their capital and their energies to hit the wealth that may possibly be underground.

It is by no means improbable that the handsome premium offered by Mr. Basset for the utilisation of a mineral substance found in

the county heretofore waste will have a claimant. The proprietors of the Phoenix Brick Works, near Gunnislake, have succeeded in manufacturing from an unctuous friable killas a thoroughly damp-proof brick and other wares. By a patented process the killas is ground and brought into a plastic condition, and then worked into bricks and the like, which become thoroughly vitrified—not on the surface merely—and are thus utterly impervious to all damp. Moreover, white bricks are produced as well as blue. This appears to be a very valuable discovery.

Mr. E. H. Rodd, so long the respected purser of North Wheal Crofty, is about to resign. A gentleman more sincerely desirous of doing his duty to the general body of adventurers, and to the mining interest of Cornwall generally, than Mr. Rodd it would be impossible to find. His courtesy and willingness to oblige every shareholder will long be remembered. Mr. J. H. Lean, who has been clerk to the mine for 22 years, and is thoroughly acquainted with the details of the purser's work, offers himself as Mr. Rodd's successor, and the shareholders could not make a better choice.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Feb. 17.—The course of business in the South Staffordshire Iron Trade is without improvement either in the pig or finished departments, and prices of the commoner descriptions have, in some instances, receded to a slight extent; but any fall of importance is prevented by the continued great cost of production. The quotations for pigs remain at 3, to 3, 5s. for common cinder, and 4, 10s. to 4, 15s. for best native all-mine. Cold-air pig is firm at 6, per ton for Lilleshall and other noted makes. Owing to the restricted demand for pig-iron it is probable that several additional furnaces will shortly be added to the number out of blast. In one or two cases finished iron is reported in somewhat better request this week, but the general demand is very quiet, and some transactions in common iron have taken place at 1s. 3d. to 2s. 6d. per ton under last week's rates. There is no change in the quoted prices.

A special meeting of the South Staffordshire Iron Trade, held in Birmingham on Thursday, to consider the proposed re-establishment of the Board of Conciliation, the secretary (Mr. D. Jones) was instructed to arrange the election of 12 representative masters as a committee to carry out the scheme, the gentlemen elected to constitute the Wages Board.

The Staffordshire Coal Trade does not present much change upon our last report, but, if anything, the demand is quieter, especially as regards forge coal. For the present the course of prices is steadily sustained, the better qualities showing some firmness.

The following were among to-day's quotations on the Birmingham Stock Exchange:—Sandwell Park Colliery, 29, sellers; Cannock and Huntington Colliery, 1 to 2 prem.; Hamstead Colliery, 14 prem.; Chillington Iron (10 paid), 4, 3; John Bagnall and Sons, 6, 2; Pelsall Coal and Iron, 5 to 4 dis.

Mr. Stephen Thompson, of the firm of Thompson, Hatton, and Co., the Bilston Tin-Plate Works, is retiring, and the business will be carried on under the style of Hatton, S. and Co.

The North Staffordshire Iron Trade is quiet, and the prospects of the spring trade are not very encouraging. Orders for finished iron are few in number, and the bar-mills are not doing more than five turns per week. Pig-iron is in moderate demand, and prices are firm. There is a good demand for house coal, but manufacturing fuel commands very little enquiry.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

Feb. 17.—The Iron Trade is still dull, and it is feared is likely to remain so, buyers still hanging back in the apparent hope that prices will be still further reduced, in consequence of the expected fall in the wages of colliers. On the other hand, ironmasters contend that they cannot possibly sell at lower rates, and that they would, rather than accept such, close their establishments altogether. Business remains slack on home account, and shipments foreign continue to be remarkably small.

The principal subject of discussion during the week has been the award of the Conciliation Board, which enforces reductions in wages varying from 7 to 33 per cent. Neither masters nor men can be said to be perfectly pleased with the award. The steam coalowners assert that the reduction which they are authorised to carry out—viz., 7 per cent.—is not sufficient to enable them to make reasonable profits, and the men in the house coal pits are also dissatisfied; and the same remark applies to the anthracite coal proprietors. However, whether satisfied or not with the award, there appears to be a general inclination to bow to the inevitable; and, as a matter of fact, to act otherwise would be unworthy of either masters or men, seeing that they had previously agreed to submit to the result of the investigations of their representatives whatever it might be. The shipments foreign of coal are about the same as last reported, and no movement is apparent in the demand. House coals are unaltered, and the patent fuel trade is inactive.

The Tin-Plate Trade is somewhat unsatisfactory just now. Reductions will be shortly enforced in the wages of certain classes of workmen in Glamorganshire, and the movement will, no doubt, spread to other districts where the trade is carried on.

It is feared that the railmen at Tredegar will be almost without employment at the end of March. The millmen at Briton Ferry Ironworks, who at first struck at a reduction of 12, per cent. in their wages, have now resumed work, being convinced that it was wrong to strike against the agreement entered into in 1873.

It has been decided to present a testimonial to Mr. Joshua Davies, late manager of the steam coal colliery at Llwynypia, under the Glamorgan Coal Company. The output at this pit has increased to an enormous extent since Mr. Davies took charge. He has been appointed manager of the Penrhwi Colliery, one of the largest undertakings in South Wales.

An excellent seam of anthracite coal, 9 ft. in thickness, has been won at Trimsaran.

The Taff Vale Railway Company have declared a dividend at the rate of 10 per cent. per annum for the past half-year, and a bonus of 1 per cent. The sum of 7251, will be carried forward. This line is one of the most successful in the kingdom. We may add that the traffic receipts for the local lines again show a large increase over the corresponding week of last year.

A strike took place at the Glant and Gowydd Collieries, Wannerlywydd, but the men afterwards agreed to resume work at a reduction of 10 per cent.

The case of the Vale of Neath Colliery Company (Limited) v. Farne was before Vice-Chancellor Bacon on Saturday. The question was as to an alleged contract entered into by the defendant with the plaintiffs for their colliery at Abergarw, Glamorganshire. The defendant now filed a demurrer to the plaintiffs' statement of claim of 6000, which his lordship allowed with costs, giving leave, however, to amend the statement.

A mass meeting of colliers took place at Aberdare on Monday for the purpose of discussing the merits of the sliding scale recently issued. The meeting expressed confidence in their representatives on the board, and accepted the resolutions passed in reference to the sliding scale, but disapproved of the proceedings of the board being carried on in secret, and also for having induced the men to put their names to the late agreement without knowing what it would actually be. The decision of the Conciliation Board was received without excitement in the Rhondda Valley.

A delegate meeting of men employed in the anthracite collieries has been held at Swansea. It appeared from a statement made by the miners' agent that the employers do not like the idea of their pits being classed by the Conciliation Board with the steam coal collieries. The masters seem (according to this statement) to be in favour of accepting the amount of reduction that would fall on the steam coal to fix the minimum rate of wages by, but not to be governed in the rise and fall of wages by the selling price of steam coal. This view of the question will be submitted to the men at the various collieries. The Hendreforgan Colliery is open to the men now at a reduction of 7 per cent., which terms the meeting for the present accepted.

There is now a slight hope that some amount of business will be done at the Cyfarthra Ironworks, which have been almost entirely closed for a lengthy period. A deputation of men have asked Mr. Crawshaw to recommence operations, but the reply has been that iron could not be made at the works for present prices, and, moreover, all the old customers had been lost. Mr. R. T. Crawshaw, however, would not for the present say either way, but would see what could be done for the men. No work, with the exception of some trifling orders, has been done at Cyfarthra since the middle of 1874.

The news from Merthyr is of an unpleasant nature. It appears that notices have been posted up at the collieries of the Merthyr Company that in a month's time work will cease at all the pits but two. The stoppage will affect between 700 and 800 men. The conduct of the company in ordering a cessation of work in the middle instead of the beginning of the month has been adversely criticised at meetings of miners' agents at Aberdare and of colliers at Dowdals. The meetings maintained

that the notice is in violation of the agreement made by the Sliding Scale Committee in November, 1875.

The Bill for vesting the Slirhowy Railway in the London and North-Western Railway was approved of on Tuesday at a special meeting of the former company.

TRADE OF THE TYNE AND WEAR.

Feb. 17.—There is no change of importance to report in connection with the Coal and Iron Trades here. On the whole, both trades are very dull and flat, and the whole business of the district is entirely destitute of animation. A considerable number of the works in Durham are kept pretty well employed, as they supply gas, house, and coking coal, and the demand continues fair for those kinds of coal, but those works producing steam and manufacturing coal are not at all regularly employed. The best steam coals produced in Northumberland have been reduced in price, and a little more business has been done on the Tyne in those coals, but this trade has been extremely stagnant of late, and many of the works have only been doing half-time of late; 12s. 6d. per ton may now be taken as the standard price for best steam coal; inferior sorts are sold at 10s. per ton. The demand for gas coal, both for the coasting and foreign trade, is well kept up. The imports of e-sparto grass and ore into the Tyne from Spain have been on a good scale lately. The Chemical Trades in this river continue dull. The masters on the Tyne have lately attempted to get a further reduction of 15 per cent. off the men's wages, but a sort of compromise was made, by which they agreed on both sides that a reduction of 7½ per cent. should be made all round; but, as the men have not unanimously accepted this reduction, the masters have locked the whole of the men out, and upwards of 6000 men connected with this trade are now idle on the Tyne. A number of collieries have been stopped in this district, and it is pretty certain that many others are likely to succumb if no change occur soon in the value of coal or the cost of raising it. It is well known that some of the largest concerns in the Tyne have made no profits during the past year. At the Tyne Main Collieries, near Gateshead, all the men have received notice, and it is feared that these works will be stopped shortly.

Engineers and founders have not been well employed here lately, but a little improvement has occurred. There is also more activity in the ship-yards at some points. At Jarrow, where there has been great depression in all the departments for a long period, there is a little improvement, and three ships are to be built immediately. This celebrated iron shipbuilding yard, where so many vessels of the largest size have been built, both for mercantile and war purposes, has been almost entirely closed for some time, but it is to be again got into active operation, as large orders are expected shortly.

The Iron Trade continues very dull, and no improvement can be expected until a reaction takes place in the finished iron trade. There is a fair demand for shipbuilding iron, but scarcely any demand for rails, and the bar trade is also very flat. There are rumours of changes likely to be made in the construction of the rails at some of the large rail making concerns here, so as to enable the masters to manufacture steel instead of iron rails, and no doubt the change will be a necessity sooner or later.

Some improvements in puddling and other furnaces, the working bottoms of which are formed of plates of metal, have been recently invented by Messrs. Roberts and Noble, of the Britannia Ironworks, Middlesbrough-on-Tees, their object being to reduce or modify the intensity of the heat of the bottoms during working. The underside of the plate forming the working bottom of the furnace is formed with flanges which dip into water placed beneath. The water is contained in tanks formed to receive it at one end, and allow it to pass away at the other, so as to ensure circulation of the water, and its being kept thereby comparatively cool, and maintained at a desired level. The surface of water in the tank or holder extends under the entire bottom, or nearly so. They also propose to construct a double flue or chimney draught to these furnaces.

COLLIERY ARBITRATION.—The county of Durham has lately been the scene of one of those industrial disputes which, unless they are quickly and satisfactorily adjusted, cannot fail to prove injurious to the material prosperity as well as the social well-being of the country. Happily, both the colliery owners and their workmen had the good sense to refer their differences to arbitration. The arbitrators failed to agree, and so the question as to whether there should be a reduction in the rates of wages was referred to Mr. C. H. Hopwood, Q.C. M.P., as umpire. After a patient investigation of the facts, Mr. Hopwood has decided that there shall be a reduction of 7 per cent. in the wages paid to the miners, and of 4 per cent. to the surface workmen, including engine-drivers, joiners, smiths, masons, and masons' labourers. This is the first award of the kind in the history of the coal trade in the county, and it is submitted to a reduction of 4 per cent. in the amount of their wages. Mr. Hopwood has had great experience in questions of this nature, and in a peculiar degree he commands the respect and confidence of the skilled workmen of the northern counties. We have no doubt that whatever disappointment his decision may occasion to the miners of Durham, they will loyally accept it as a fair and equitable settlement of the controversy.

THE SCOTCH MINING SHARE MARKET—WEEKLY REPORT AND LIST OF PRICES.

During the past week there has been no improvement in the amount of business done. In shares of iron and coal concerns prices are generally a little lower, the reductions amounting to:— ½ on Lochore and Caplehead; ½ each on Boleckow Vaughan, A, and Ebbw Vale; ½ on Benhar (6½ paid); 4s. each on Glasgow Port Washington and ditto (prepaid); and 1-16th on Benhar (full paid). Nanty-Glo and Blaina (preferred) is, however, quoted 1 higher; and Omoa and Cleland has improved ½ on the satisfaction given in the meeting on Monday (reported elsewhere). Cardiff and Swansea have been dealt in at 2½; and Whitehaven Iron, which was at 33s. 4d. The movements are quite unimportant in foreign copper concerns; Huntington is 1s. dearer, and Tharsis (new) ½, but Tharsis (old) is ½ lower. Rio Tinto is 5½ to 5¾. Bensberg Lead, 3s. sellers. In home mines, Dolcoath is 3s. sellers; Dunsley Wheel Phenix, after changing hands at 6d., is now 5s. 6d. to 7s. 6d., quite a remarkable rise in its small way; Glasgow Caradon, 32s.; ditto (new), 22s.; Killifreth better, at ¾ to ¾, an improvement having occurred; Marke Valley, ¾ buyers; New Pembroke, 4s. 6d. to 6s. 6d.; and West Maria, 7s. sellers. In shares of gold and silver mines, Emma is 1s. per share lower, and Richmond, ¾; while Flagstaff has advanced ½. Eschweiler is 1½, sellers; Pestana, ¾; and Teoma, 1½ to 1¾. Young's Paraffin, ½ lower, is the only change in shares of oil companies. In miscellaneous, Peruvian Nitrate again ½ lower; others quite the same. Some business has been done in Phospho-Guano shares:—A, preferred, has been sold at 7½, now 7¼, buyers; B is quoted 2¼ to 2½. A detailed list of the several days' business follows:—

On THURSDAY last, the market was quite neglected. Dunsley Wheel Phenix done at 9d. and 6d., closing 9d. to 1s. Emma shares done at 4s., closing 4s. to 4s. Killifreth, 14s. to 15s.; New Pembroke, 4s. to 4s.; Omoa and Cleland, 42s. to 43s. Richmond shares done at 6½, closing 6½ to 7½. Tharsis shares done at 24½ and 24½, closing 24½ to 24½; new shares done at 18½, closing 18½ to 19½. Whitehaven Iron, 3½, buyers. Young's Paraffin shares done from 8½ to 8½-16th, closing 8½ to 8½. Scottish Wagon (all paid), 11 1-16th to 11 1-16th.

On FRIDAY a little more business was done. Benhar, 11 to 11 1-16th. Bensberg Lead, 3½, buyers. Boleckow, Vaughan, A, 5½ to 5½. Cardiff and Swansea, 3s. sellers. Ebbw Vale shares done at 13½, closing 13 to 13½. Glasgow Caradon (new shares), 20s. to 22s. Huntington shares done at 21s., closing 21s. to 22s. Killifreth, 14s., buyers. Monkland, 58s. to 60s. New Pembroke, 4s., buyers. Omoa and Cleland shares done at 42s., closing 41s. to 42s. Peruvian Nitrate, 10s. sellers. Pestana United, 2s. to 2s. Plynlimmon Lead, 14s. to 14s. 6d. Richmond shares done at 7, closing 6 1-16th to 6 1-16th. Tharsis shares done at 24½, 24½, and 24 1-16th, closing 24 1-16th to 24½. Whitehaven Iron, 3½, buyers. Young's Paraffin shares done at 8 1-16th, closing 8½ to 8½. Scottish Wagon (all paid), 11 1-16th to 11 1-16th.

On SATURDAY the business done was almost nominal. Benhar, 11 to 11 1-16th; Cardiff and Swansea, 2 1-16th to 2 1-16th. Ebbw Vale shares done at 13, closing 13 to 13½. Huntington, 21s. to 23s. Lochore and Caplehead shares done at 7½, closing 7 to 7½. Monkland, 58s. to 59s.; 7 per cent. guaranteed, 6 to 6½. Omoa and Cleland, 41s. to 42s. Tharsis shares done at 24 1-16th, closing 24 1-16th to 24½. West Maria, 7s., sellers. Whitehaven Iron, 3½, buyers. Young's Paraffin, 8 1-16th to 8 1-16th; Scottish Wagon (all paid), 11 1-16th to 11 1-16th.

On MONDAY the market continued inactive. Australian Mines, ¾ to ¾; Benhar, 11 to 11½; Canadian Copper Pyrites, 1½ to 1½; Cardiff and Swansea, 2½, buyers; Dunsley Wheel Phenix, 2s. 6d. to 2s. 6d.; Emma, 4s. to 4s.; Eschweiler, ¾ to 1; Flagstaff, 2s. 6d., buyers; Glasgow Port Washington, 7s. to 6s.; ditto (prepaid), 7s. to 6s.; Lochore and Caplehead, 7 to 7½. Monkland shares done at 58s., closing 58s. to 59s. New Pembroke, 4s. to 4s. Omoa and Cleland shares opened at 42s., and improved to 41s. 6d., 41s. Pestana United, 2s. to 2s. Richmond, 6½ to 7. Tharsis shares done at 24½, closing 24½ to 24½; new shares, 18½ to 19½. Young's Paraffin shares done at 8½, closing 8½ to 8½. Scottish Wagon (all paid), 11 1-16th to 11 1-16th.

On TUESDAY the market was quiet. Benhar done at 11; new shares done at 6½. Canadian Copper Pyrites, 1½ to 1½. Cardiff and Swansea done at 2½, closing 2½, sellers. East Van, 20½ to 21½. Emma, 4s. 6d. to 5s. Flagstaff, 1½ to 1½. Gunnislake (Clitters), 3½, sellers. Huntington done at 21s., closing 21s. to 22s. Killifreth better, at 15s. to 17s. 6d.; an improvement, it is said, has occurred in the mine. Lochore and Caplehead, 7 to 7½. Monkland, 57s. to 59s. New Pembroke, 4s. 6d. to 4s. Omoa and Cleland done at 42s., closing 42s. to 47s. Pennerley, 1½ to 1½. Pestana United done at 2s. 6d. Rio Tinto, 5½ to 5½. Scottish Wagon, 1½ to 1½; the sale of coal for the month of November last

amounted to 13,203 tons. Tharsis done at 24½ and 24 1-16th, closing 24½ to 24½. Whitehaven Iron, 3½, buyers. Young's Paraffin done at 8½, closing 8½ to 8½. Scottish Wagon, all paid, done at 11 1-16th.—York Peninsula Mining Company (Limited). The usual report, containing details of the operations in the different parts of the mine, has been received from this company's Kurilla property, dated Dec. 27 last. It appears a run of ore ground of at least 65 fathoms is now expected in one part of the mine. Five trial shafts and an "attle" pass have been sunk, making an aggregate of 67 fathoms, and 65 fathoms of level driven, or in all (say) 130 fathoms odd; and the ore already raised (12000) has met all the expenses, roughly calculated on output and tribute operations at 8000, leaving about 4000, or one-third, to the good. "The ore, 60 tons of which you have received accounts sales since my last (writes O. P. Anthony), realised very satisfactory prices, bringing net 64½. Subsequently tenders have been invited for about 40 to 45 tons, and the samples are taken. I dare say the average will be about 16 per cent., or above. I have on hand about 50 tons of 20 per cent. ore, raised by tributers."

On WEDNESDAY market still inactive. Bensberg Lead, 3s. sellers. Boleckow, Vaughan, A, 5½ to 5½. Canadian Copper Pyrites, 1½ to 1½. Dolcoath, 3s. sellers. Dunsley Wheel Phenix done at 6s., closing 5s. 6d. to 7s. 6d. Ebbw Vale done at 13, closing 13 to 13½. Emma done at 4s. 6d. and 4s., closing 4s. to 4s. Flagstaff, 2s. to 2½. Glasgow Port Washington, 7s., sellers; ditto, prepaid, also 7s., sellers. Huntington, 20s. to 22s.; Lochore and Caplehead done at 7, closing 7 to 7 1-16th. Marke Valley, 3½, buyers. New Pembroke, 4s. 6d. to 6s. 6d. Omoa and Cleland done at 42s. and 47s., closing 41s. to 42s. Richmond done at 6½ and 6 1-16th, closing 6½ to 6½; this week's run is \$3000. Teoma, 1½ to 1½. Tharsis done at 24 1-16th and 24½, closing 24 1-16th to 24½. Young's Paraffin done at 8½, closing 8½ to 8½.

J. GRANT MACLEAN, Stock and Share Broker.

Post Office Buildings, Stirling, Feb. 17.

FROM A LONDON BROKER'S CIRCULAR.

The market for English railways has been very dull in tone all the week, and, with the exception of one or two stocks, prices have declined. North British have been freely sold, great uncertainty prevailing as to the favourable nature of the dividend, the fall for the week being about 3 per cent. The traffic returns of the Great Eastern and Metropolitan District lines were favourable, but in most other cases unsatisfactory. Among foreign and American railways there is little to note. Eries meet with some attention. Canadians and Grand Trunk have been flat on the proposed issue of new capital by the Grand Trunk Company. The tone of the foreign market is firm. Spanish, Peruvian, and Turkish have been in demand, and show an improvement in price. Egyptians continue to fluctuate, owing to speculative operations, but the tendency of the market is favourable, investors quietly buying, and holders of Egyptian securities feel encouraged by the tone of the speeches in the House of Commons and the attitude assumed by our Government with respect to Egyptian affairs. The English funds are firmer on the "Bank return," which was satisfactory. No change has been made in the rate of discount.

London, Friday Morning, Feb. 18.

CWM DWYFOR.—We hear that this mine is progressing rapidly towards a great success. Operations are being carried on with energy, both underground and at surface. The crusher, which has been manufactured by Messrs. De Winton, of Carnarvon, will soon be ready to attack the large piles of lead stuff already at surface, and which are increasing in bulk every day. From the present appearance of the mine regular returns of ore may be expected as soon as the dressing machinery is ready. Perhaps there is no mine in Carnarvonshire at the same stage of development that can show such fair prospects of a prosperous future. No external circumstances can militate against the mine. All the machinery is propelled by water-power, thus saving the cost of coal. The railway having been brought actually into the mine dispenses entirely with the carting of either ores or materials. The company have entrusted the local management to one who is most energetic as well as intelligent, and who has the interest of the shareholders at heart.

HALIFAX.—Feb. 17. The following quotations are from Mr. J. H. Thackrah's list:—Halifax and Huddersfield Union Bank, 25½; (Joint Stock); Bank, 28½; Halifax Commercial Bank, 24½; London and Yorkshire Bank, 26s. 9d.; John Crossley & Co., 13½; Whitworth and Co., 8½; Elland Gas, 20; Rastick Gas, 18½; Bradford Brick and Tile, A, 23½; B, 7½; Charlestown Brick and Tile, 9½; Ripponden Commercial, 12 (ex div.); Hebden Bridge Cotton, 10½; Yorkshire Boiler Insurance Company, 22s. 6d.; Norton Brothers, 7½.

INVESTMENTS AND SPECULATIONS.—The new edition of Messrs. A. W. Thomas and Co.'s pamphlet of Investments and Speculations for 1876 has just been issued, and gives evidence of the same amount of care having been bestowed upon its production as upon that of its predecessors. In the introductory remarks they observe that the best advice they can give to those who wish to discern between what is honest or otherwise is to pay attention to anything which is only recommended by abstract and intangible statements, the truth of which cannot possibly be investigated, but to note where facts and data are given capable of verification, and where satisfied of honesty to give confidence. The relative attractions of foreign stocks, railways, telegraphs, and mines are considered. With regard to mines in which Messrs. Thomas have had direct experience the remarks are well worth perusal. They state that nearly every mine mentioned by them last year is in a considerably improved position now, while those that at present do not command so high a price have at different times in the 12 months advanced considerably, and are now only very slightly under the prices then quoted. A new selection is made for the current year.

LONDON INVESTMENT CIRCULAR.—The February number of Messrs. W. J. Tiltshire and Co.'s circular contains an excellent review of the Stock and Share Markets for the month, and in the portion devoted to mining they furnish notes and reports upon Medlyn Moor, Elgar, Plynlimmon, East Chiverton, West Craven Moor, Pennerley, and other mines. They remark that the present is a most favourable time for investing in carefully selected lead mines, and that many properties now selling at almost nominal prices, considering future prospects, will in all probability yield very large profits in a course of a few months. A selection of mines recommended is given, which will be useful to investors. The circular contains a good share list and tables of stamp duty on transfer of stock, shares, debentures, &c. The circular altogether contains much useful information.

BRITISH BUREAU OF SELECTED MINES.—The February number of Messrs. Enfield's Circular, bearing this title, contains a considerable amount of useful information, amongst which is a reference to Carnarvonshire mines. In which it is stated that the profitable results obtained from lead mining during the past year, and the excellent prospect of continued prosperity for this class of enterprise, has led to the re-opening of many mines which in less favourable times failed to secure the recognition they deserved, and as the new adventurers often commence operations with vastly increased facilities for realising profits, owing to the additional knowledge placed at their disposal by the work of development carried on in neighbouring mines, properly selected lead properties would appear to offer special attractions to capitalists. The lode being very rich in the Llanrwst Mine, within a few yards of the Corlan Farchog boundary, an influential company has been formed in Birmingham for the purpose of acquiring and developing both the Corlan Farchog and Ralltwin Mines, which are so situated that the Llanrwst Mines will lie between them.

LLANRWST MINES—SPECIAL REPORT.

Feb. 16.—I am glad to be able to inform you that the mine continues to improve. At the adit east of Prospect shaft we have what appears to be two lodes; some little time since a branch or lode came out from the south side, and united with the lode which has been driven to the surface. We have now a large and good body of these lodes in our driving up to the present; but the level is now 10 feet wide, and the lodes still diverging, so that in future it will be necessary to drive two levels. We shall drive on the north part first, and when this is a little advanced shall commence to drive on the south part. The lodes as they now appear will produce 3 tons of lead ore per fathom. The winze from the 10 above adit is held through this level; it came down on the north part, and was yielding at the time of hoing, and for some time previously, 2 tons of lead per fm. The south part is still standing beneath the winze all the way up. A few days since we commenced to drive on the north and south branch west of Prospect shaft, at the adit. It shows a little great at that time, but nothing to save, much less to value; it is now 2 ft. wide, producing 1 ton of lead ore per fathom. In the cross-cut south of Prospect shaft, at the 10 above adit, we have got into the main lode, but the cross course on which our driving was projected is very large, and it may be some days before we get through it so as to see the lode in a settler state; at present it shows lead, blende, gossan, quartz, carbonate of lime, &c.—a mixture such as cross courses and lead lodes usually exhibit at the point of their intersection. I need scarcely add that the mine is looking well; indeed, it is satisfactory to say that it never looked so well as it does now. The lodes are well defined, and I never before saw so much lead in any mine at a similar stage of development.—ROBERT KNAPP.

At the Mutual Life Assurance Society meeting the proposals for assurance during the past year was stated at 319, representing 190,955, of which 95 were declined or deferred, and 224 were accepted, assuring 129,055, producing annual premiums amounting to 4097. The total income was 118,474, the accumulated fund increased to 87,576, and the claims represented 46,994, or, with the addition of bonuses, 59,523.

At the Auto-Pneumatic Gas Machine Company (Limited) second ordinary general meeting, on Wednesday, a dividend of 10 per cent. per annum was declared.

A petition to wind-up the Hawne Collieries Company (Limited) has been presented to the High Court of Justice.

COMPRESSING OR FORCING FLUIDS.—The invention of Mr. T. S. DISTON, of Philadelphia, relates to apparatus to be employed more particularly for obtaining a continuous supply of compressed air, and consists in the combination of two or more revolving vanes having curved sides, two or more revolving segments with intervening concave recesses adapted to the said vanes, a chest or casing adapted to the vanes and segments, and a valve or valves operating in union with the vanes, segments, and recesses for controlling the outlet of the blast.

MESSRS. J. M. LAWRENSEN AND CO.,
ACCOUNTANTS,
SHARE AND MINING BROKERS,
ARCADE CHAMBERS,
90, DEANSGATE, MANCHESTER.

COALS.

CONTRACT DEPARTMENT, ADMIRALTY, WHITEHALL, S.W.
19TH FEBRUARY, 1876.

TENDERS WILL BE RECEIVED until Two o'clock on TUESDAY, the 8th March, for the SUPPLY of LAND ENGINE FURNACE, METAL MILL, SMITHERY, COKE, BAKERY, and HOUSEHOLD COALS, to Her Majesty's Dockyards, Victualling Yards, Royal Naval Barracks, Naval Hospitals, &c.

The contracts are for specific quantities, and for forward delivery within stated periods. Tenders may be for the whole or any portion of the quantities required. Their Lordships do not bind themselves to accept the lowest or any tender, and they reserve to themselves the power of accepting any part of a tender. Forms of Tender, containing all particulars, may be obtained at this office, written or personal application.

FRANCIS W. ROWSELL, Director of Contracts.

AUSTRALIAN UNITED GOLD MINING COMPANY (LIMITED).

WE, the UNDERSIGNED LIQUIDATORS of the ABOVE NAMED COMPANY, hereby give notice that we are ABOUT to close the AFFAIRS of this COMPANY, and any person or persons having a claim against the said company are requested to send to us forthwith the particulars of same, in order that it may be settled, if correct, and if no such claim or claims are received within one month from this date we shall proceed without delay to complete the winding up of the company as if no claims existed.

We also hereby request the holders of Share Warrants to bearer who have not sent in particulars of their holding to forward us immediately the numbers of said Warrants, the distinctive numbers of the shares, and the number of shares then contained in order that they may participate in the distribution of assets now being made.

HENRY WM. LAMB, } Liquidators.
J. H. MURCHISON, }

8, Austinfriars, London, 16th February, 1876.

TO FINANCIAL AGENTS, AND OTHERS.

WANTED, a Person of good connection, to co-operate with the COPPER MINE in the richest district in CORNWALL. Anyone undertaking the formation of a company will be liberally treated, and receive the APPOINTMENT of SECRETARY.

Apply to "Miner," MINING JOURNAL Office, 26, Fleet-street, London.

WANTED, an ACCURATE DIALLER, SURFACE SURVEYOR, and NEAT DRAUGHTSMAN. Knowledge of Mining advisable, but not essential.—Address, Mr. EDDY, Skipton.

WANTED, by a TIN ASSAYER, a SITUATION at HOME or ABROAD. Can efficiently undertake Tin Smelting or the Dressing of Minerals. Fourteen years experience. Has a knowledge of Copper and Silver Assaying. Address, "J. S.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO MINING COMPANIES.

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NOTICE.

TO BE SOLD, by an Order of the Court, ONE HUNDRED SHARES in the TYLLWYD LEAD MINING COMPANY (LIMITED), FOR SALE, ONE HUNDRED TYLLWYD SHARES. An offer wanted. Application should at once be made to Mr. C. BERT, 3, Crown-court, Temple-lane, London.

TANKERVILLE MINING COMPANY (LIMITED).

Notice is hereby given, that the Directors of the Tankerville Mining Company (Limited) have this day DECLARED a DIVIDEND of FIVE SHILLINGS PER SHARE (free of income tax), PAYABLE on and after the 23rd instant. Notice is also hereby given, that the Transfer Books of the company will be closed from the 14th to the 23rd instant, both days inclusive.

By Order, J. H. MURCHISON, London Manager and Secretary.

8, Austinfriars, London, 2nd February, 1876.

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Capital £30,000, in 10,000 Shares of £3 each,
Of which only 5000 Shares are now to be issued.

PAYABLE—£1 per share on application, and £1 on allotment; with
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If no allotment is made the deposit will be returned in full.
To be incorporated with Limited Liability under the Companies Acts,
1862 and 1867, by which the liability of the shareholders
is limited to the amount of their shares.

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JAMES WOOD, Esq. (Provost of Banff).
ROBERT JAMES LAING, Esq., C.E. The Limes, Upper Clapton.
FRANCIS REED WILSON, 20, St. Helen's-place, E.C.

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MANAGER IN SPAIN—JAMES G. WOOD.
SECRETARY—F. F. WILSON.

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PROSPECTUS.

The company is to be formed for the purpose of acquiring and working certain
valuable calamine mines, situated near the village of Linares, in the Province
of Teruel, Aragon, Spain, comprising an area of about 330 English acres in
all.

The mines are eleven in number, each of about 30 English acres, some of them
worked by, and all adjoining, mines which have been for many years worked,
and are now being worked, at a great profit.

About 150 tons of calcined ore are now in store, and some 600 tons ready for calcination
lie at the mouth of the various mines.
Taking the value of calcined ore at Swansea to be £5 18s. per ton for 50 per cent.,
there would result a profit of £1 14s. per ton. But as the calcined ore would average
at least 55 per cent., this would, at 3s. 6d. per unit, bring the profit up to £2 11s. 6d.
per ton. At the present price of spelter the profit would be £3 7s. 6d. per ton, but
supposing that the output is only 5000 tons, just half what M. de Garay calcu-
lates on, and that the profit per ton be £2 11s. 6d., a moderate estimate, we get an
annual profit of £12,875, which, on a capital of £15,000, would be equal to 86 per
cent. per annum.

In the above calculation the value of the lead ore has not been taken into account,
but the mines yield large quantities of lead ore of from 50 to 60 per cent., for which
a ready sale is found in the neighbourhood.

The directors having satisfied themselves as to the character and ability of the
vendor, confidently recommend this as a *bona fide* undertaking. The vendor is
willing to embark his personal interest in the property in paid-up shares of the
company, and to manage the mines in Spain, at a salary dependent on the profits.

No expensive machinery nor plant will be required to carry out the works, so
that only a small capital is necessary.
The existence of mineral of a highly valuable character, sufficient to yield a profit-
able return, is certain, and there is every reason to expect that the quantity and
quality of mineral in the mines are such that the property will prove a much
more valuable one than is estimated in this prospectus.

The prices of the ore at Swansea and the quality of the calcined ore have been
severely tested by the directors, and the verification of the figures, and the original
analysis by Messrs. Claudet and Co., assayers to the Bank of England, may be
seen at the offices.

The only contract entered into is one bearing date 9th of December, 1875, be-
tween James Gardner Wood, the vendor, and Felix Francis Wilson, on behalf of
the company.

THE EAST ELWY RIVER LEAD MINING COMPANY (LIMITED).

Incorporated under the Companies Acts, 1862 and 1867.

Capital £20,000, in 4000 Shares of £5 each,

For which share warrants to bearer will be issued, thus avoiding the trouble
and expense of transfer deeds, and doing away with that annoyance
so frequently the result of registration as a shareholder.

Payment, £2 10s. on application, and £2 10s. on allotment.

If no allotment is made the deposit money will be returned without deduction.

MESSRS. THORNYCROFT AND CO., 30, Broekley Buildings,
South John-street, Liverpool, are AUTHORISED TO INVITE SUBSCRIP-
TIONS FOR ONE THOUSAND SHARES OF THE EAST ELWY RIVER LEAD
MINING COMPANY (LIMITED). Unlike many of the Welsh lead mines
brought before the public, where "promising appearances" and "reliable indica-
tions" alone form the inducements held out to investors, this property has been
developed to such an extent as to prove the existence of rich lead ore both in the
shallow and deep workings, and in such quantities as to justify the strong expecta-
tion of early dividends held out by the prospectus.

In the case of this mine it is not a question of speculation as to what will be
found when certain work is done, but an absolute fact that the completion of the
deep adit level will provide facilities for getting away the ore already discovered,
and also promote the further profitable development of this property, which Messrs.
Thornycroft and Company confidently believe will eventually prove to be one of
the most successful mines in Wales; and, judging by the high premiums to which
dividend-paying mine shares rise in the market, they think it not at all improba-
ble that the East Elwy River Lead Mine Company's shares of £5 each may ere
long be quoted from £10 to £20 per share; and it is their belief that, under any
circumstances, the shareholders may look for a very large percentage of profit.

ABRIDGED PROSPECTUS.

The property of the East Elwy River Lead Mining Company (Limited) is situated
a short distance from the village of Talhaiarn, and about five miles from the Aber-
ystwyth station of the Chester and Holyhead Railway.

The property has been carefully examined by several well-qualified authorities,
who express in most decided terms the high opinion they unanimously form of the
great value of this mineral grant.

Capt. Thomas Mitchell, manager of the famous Parys Mountain Mine, and who
has had great experience of mining properties, says—"I expect a great mine will
be opened out, equal perhaps to any in the district, not even excepting the famous
Talargoch Mines, which are situated only a few miles eastward."

Of the Talargoch mines, which it is said, returned over a million and a half
sterling in profits, and are now being extensively developed.]

"And considering the number of the ore obtained therefrom, the congenial nature
of the rock in which they are embedded, the extraordinary working facilities the
property possesses, the never-failing supply of water-power available, and the other
numerous conveniences appertaining to this property, I question if a more eligible
property, and one likely to turn out more successfully with a small outlay of capital
could be found in North Wales."

The following assay of the produce of the mine has been made by Messrs. John-
son, Matthey, and Co., assayers and melters to the Bank of England and Her
Majesty's Mint.

Assay Office, Hatton Garden, London, E.C.

September 10, 1874.

Stone of ore from East Elwy River Lead Mine.—Produce of lead, 80-50 per cent.

(Signed) JOHNSON, MATTHEY, and Co.

It will be interesting here to note that 14 lead mines, with a total subscribed capital
of a little more than £600,000, have returned in dividends £2,250,000 sterling, or
equal to a return of 360 per cent. on the outlay. Of these, by far the most pro-
fitable are Welsh mines. The Llanrhondda Mines, for instance, have returned nearly
£200,000 on an outlay of £7500; Minera, nearly £580,000 on an outlay of £45,000;
Gwynedd, nearly £70,000 on an outlay of £6000. Another Welsh mine,
known Van Mines, returned £290,000 on an outlay of £90,000; and, lastly, the well-
known Van Mines, since its opening, six years ago, given nearly £200,000 in
profits. With these figures before us, and considering the forward state of develop-
ment of the East Elwy River Lead Mine, with ore discovered at several points, it is
not being over sanguine to predict that at an early date the shareholders may look
for dividends on a scale that will render this mine conspicuous in the records of
the many already celebrated Welsh lead mines.

Prospectuses, applications for shares, and any further information may be ob-
tained from the brokers, Messrs. THORNYCROFT and Co., 30, Broekley Buildings,
South John-street, Liverpool.

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Lot, VALUABLE FURNITURE, STOCK IN TRADE, AND EFFECTS, com-
prising 48 Trotman's, Porter's, and Martin's patent and ordinary anchors and
stocks, 30 tons of stud cables, small link chains, steam and other cranes, forges,
shackles, windlasses, new and second-hand winches, chain rollers, swivels, pulleys,
ship stoves, about 20 tons of new sheet bar, and angle iron, wedge blocks, ratched
braces and drill stocks, dies, anvils, four pairs of smiths' bellows, hand truck,
boats' davits, house pipes, windlass rims and poles, stoppers, weighing machines,
by Avery), mandrills, break iron, a 30 inch iron safe, sundry smiths' tools, about
40 tons of new and old scrap, FOUR GOOD OPEN-DECKED BARGES, and
miscellaneous effects.

May be viewed prior to the morning of sale, and catalogues obtained, on the
premises of JAMES GLANVILLE, Esq., Accountant and Trustee, 15, Great St.
Helen's; F. BRADLEY, Solicitor, 75, Mark-lane, City; at the principal Inns in the
neighbourhood; and at Mr. MITCHESON'S Auction and Estate Agency Offices,
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THREE SHARES (in Chill designated Barras) in the CARRIZALILLO MINING
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The CARRIZALILLO COMPANY own the celebrated DESCUBRIDORA
MINE, and the three adjoining sets of SAN JUAN, CANCHAS, and SAN FRAN-
CISCO, which are all worked under one and the same system, and are situated about
thirty-three miles from the Port of Pan de Azucar, from whence there is a good
road.

The DESCUBRIDORA MINE has been working since 1859, and has yielded
large profits. There are two steam-engines at work, one of 20-horse power and
one of 8-horse power, for drawing, and there is also a newly-erected powerful en-
gine, with Blake's crusher attached; by the use of the latter the company is en-
abled to dress and return the large accumulation of low-produce ore, which will
now give a considerable profit. The mine is in thorough working order, and well
stocked with materials, rails, jiggers, crushers, &c.

The adjoining sets of SAN JUAN, CANCHAS, and SAN FRANCISCO were
acquired for the purpose of securing the ground around the Descubridora Mine,
and they have since been worked on a limited scale. There is also a shop, which
supplies the workpeople, and also horses, carts, and mules.

Also the YEGA WASHING AND JIGGING ESTABLISHMENT, with yards,
houses, shop, and stores, about nine miles from Descubridora (a tramroad is being
laid down from the mine, which will greatly lessen the costs of carriage to the
Yega). There are also dwelling-houses, cake-house, yards, store-rooms, ore-floors,
and mole at Pan-de-Azucar, with convenient launches for use in loading ships with
the ore; and there is also belonging to the company a quinchico establishment, a
watering place, situated about eleven miles from Pan-de-Azucar, on the road to
Descubridora, with dwelling-house, shop, store, mule yard, water carts, mules,
and harness; and in Chanaal Port a dwelling-house of eight rooms, and spacious bal-
cony and store below, with good cooking-house.

The company also have at Chanaal other houses and sites, and also a complete
condensing apparatus, with four boilers, &c.

Two-thirds of Descubridora, San Juan, Canchas, and San Francisco, with some
other property of comparatively small value, were sold in 1872 for the aggregate
sum of £90,000, and since then profits have been divided much more than sufficient
to repay the purchase-money, and there is every prospect of Descubridora con-
tinuing to give large profits for a considerable time.

Printed conditions of sale will be shortly ready, and further particulars can be
obtained in Chill from ROBERT FEEBLES, Esq., Chanaal, Chill; and in England
from Messrs. DRIVER, the Auctioneers, Whitehall, London; or of
S. T. G. DOWNING, Solicitor, Redruth, Cornwall.

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400 acres of surface. It adjoins the West-Moody Coal Field, just successfully
launched, which under the name (including Cannel) have been proved in addition to
the above; so that eminent engineers state that the available coal in this royalty
may be 88 feet thick.

Present holder will arrange to sell the entire to an individual or company for
what it has cost him, dividing all profit made above, which, even in a normal state
of the coal trade, must be large. Certain and safe surveys by eminent Stafford-
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style of "THE HENDON SPELTER COMPANY."

The works are situated within one mile of the well-known docks of the port of
Sunderland, and adjoining the Hartlepool Branch of the North Eastern Railway,
with which they are connected by high and low level sidings, and thereby placed
in communication with all parts of the United Kingdom. Their position, within
easy distance of both the ports of Newcastle and Sunderland, is very advantageous
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a yearly perpetual ground rent, and any quantity under 20 acres can be included
in the sale.

Being situated in the midst of the Durham Coal Field full of the best descrip-
tion can be obtained at a cost below almost any other part of the United Kingdom.
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of sufficient capacity to meet the requirements of a large number. The works can, therefore,
be doubled at a comparatively small cost.

The quality of the metal made at these works is well known, and it, therefore
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Attached to the high level sidings are large depots for coal, ore, &c.

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The purchaser can also have the option of buying the CALCINING WORKS
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supply of the raw material, and saving the mineowners' and merchants' profits.

As the ore from the South of Spain generally comes as ballast for ships laden
with esparto, it has been brought for this company at an average cost of 7s. per
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Further particulars can be had on application to the company.

FOR SALE, A VERY VALUABLE LEAD MINE, extent 750 acres,
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The geological formation is very favourable for lead ore, being secondary or car-
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Want of capital the only reason for disposing of the property.

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This quarry, with a moderate outlay, will rank among the best paying slate
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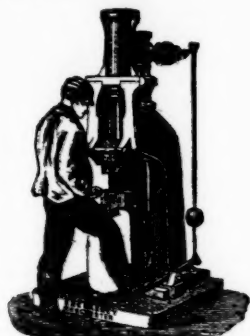
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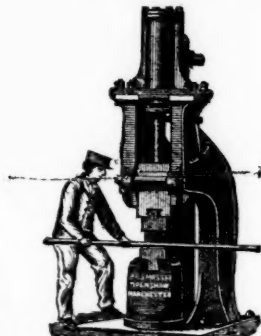
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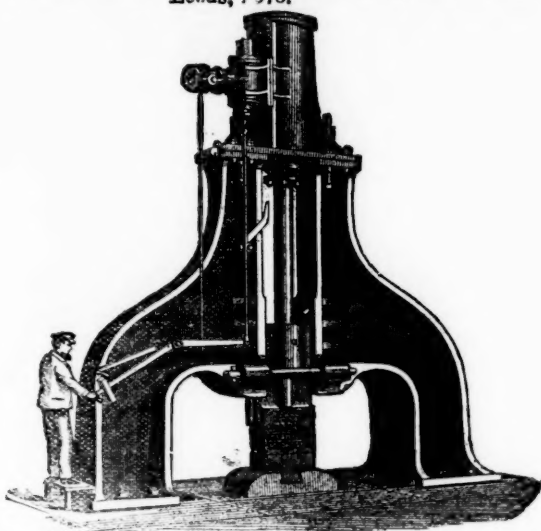
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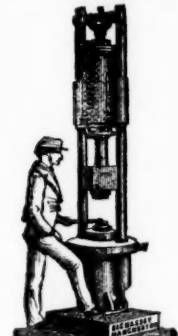
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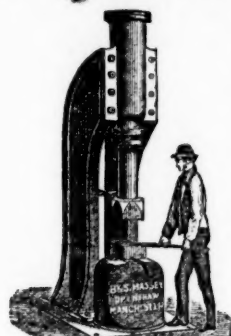
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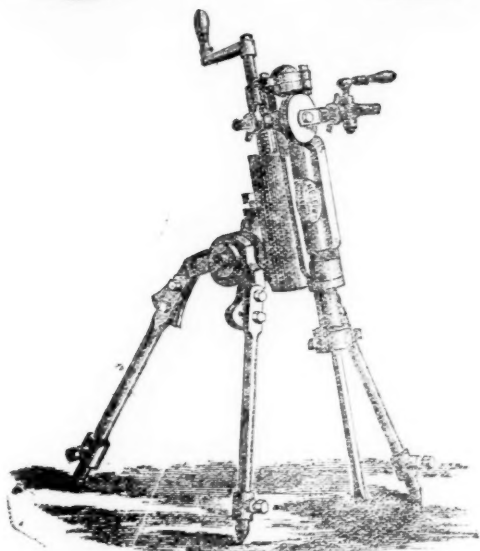
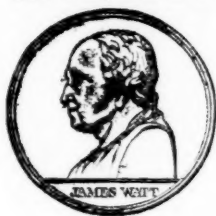
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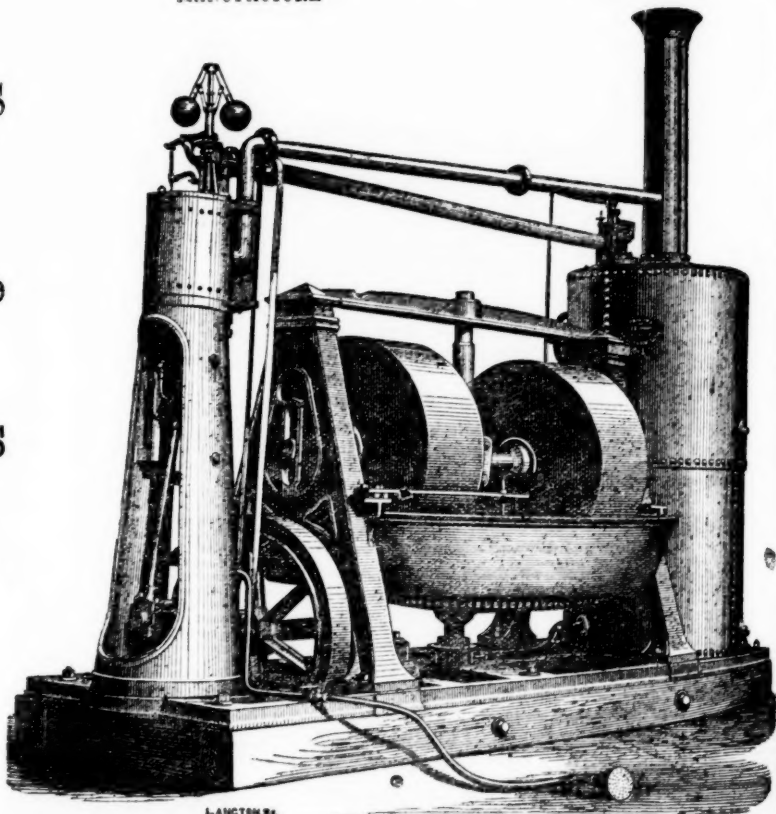
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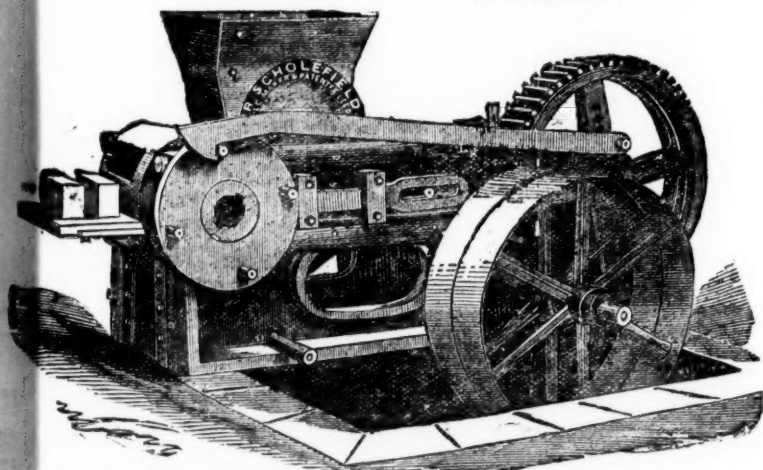
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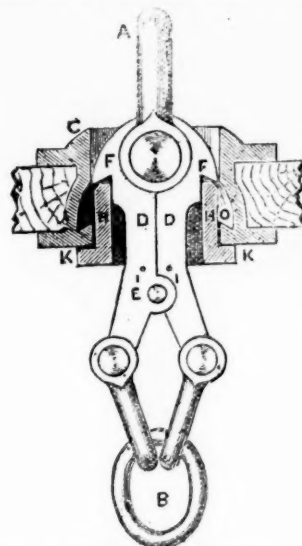
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